Summary of Results for 1 year Return Period

Half Drain Time : 401 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	39.344	0.044	0.0	0.1	0.1	0.9	O K
30 min Summer	39.356	0.056	0.0	0.1	0.1	1.4	O K
60 min Summer	39.367	0.067	0.0	0.1	0.1	2.0	O K
120 min Summer	39.377	0.077	0.0	0.1	0.1	2.6	O K
180 min Summer	39.382	0.082	0.0	0.1	0.1	2.9	O K
240 min Summer	39.385	0.085	0.0	0.1	0.1	3.1	O K
360 min Summer	39.388	0.088	0.0	0.1	0.1	3.3	O K
480 min Summer	39.389	0.089	0.0	0.1	0.1	3.4	O K
600 min Summer	39.390	0.090	0.0	0.1	0.1	3.4	O K
720 min Summer	39.391	0.091	0.0	0.1	0.1	3.5	O K
960 min Summer	39.391	0.091	0.0	0.1	0.1	3.5	O K
1440 min Summer	39.390	0.090	0.0	0.1	0.1	3.4	O K
2160 min Summer	39.386	0.086	0.0	0.1	0.1	3.1	O K
2880 min Summer	39.381	0.081	0.0	0.1	0.1	2.9	O K
4320 min Summer	39.372	0.072	0.0	0.1	0.1	2.3	O K
5760 min Summer	39.364	0.064	0.0	0.1	0.1	1.9	O K
7200 min Summer	39.358	0.058	0.0	0.1	0.1	1.5	O K
8640 min Summer	39.352	0.052	0.0	0.1	0.1	1.2	O K
10080 min Summer	39.348	0.048	0.0	0.1	0.1	1.0	O K
15 min Winter	39.350	0.050	0.0	0.1	0.1	1.1	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	30.991	0.0	0.9	19
30 min Summer	20.215	0.0	1.5	33
60 min Summer	12.800	0.0	2.2	62
120 min Summer	7.942	0.0	2.9	122
180 min Summer	5.979	0.0	3.4	182
240 min Summer	4.882	0.0	3.7	240
360 min Summer	3.646	0.0	4.3	326
480 min Summer	2.956	0.0	4.7	384
600 min Summer	2.511	0.0	5.0	446
720 min Summer	2.199	0.0	5.2	514
960 min Summer	1.782	0.0	5.7	652
1440 min Summer	1.326	0.0	6.3	924
2160 min Summer	0.988	0.0	6.9	1336
2880 min Summer	0.800	0.0	7.3	1728
4320 min Summer	0.595	0.0	7.8	2504
5760 min Summer	0.483	0.0	8.1	3232
7200 min Summer	0.410	0.0	8.2	3960
8640 min Summer	0.359	0.0	8.3	4672
10080 min Summer	0.322	0.0	8.2	5352
15 min Winter	30.991	0.0	1.2	19

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Summary of Results for 1 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
30 min Winter	39.362	0.062	0.0	0.1	0.1	1.7	O K
60 min Winter	39.373	0.073	0.0	0.1	0.1	2.4	O K
120 min Winter	39.384	0.084	0.0	0.1	0.1	3.0	O K
180 min Winter	39.390	0.090	0.0	0.1	0.1	3.4	O K
240 min Winter	39.394	0.094	0.0	0.1	0.1	3.6	O K
360 min Winter	39.398	0.098	0.0	0.1	0.1	3.8	O K
480 min Winter	39.399	0.099	0.0	0.1	0.1	3.9	O K
600 min Winter	39.400	0.100	0.0	0.1	0.1	4.0	O K
720 min Winter	39.400	0.100	0.0	0.1	0.1	4.0	O K
960 min Winter	39.399	0.099	0.0	0.1	0.1	3.9	O K
1440 min Winter	39.396	0.096	0.0	0.1	0.1	3.7	O K
2160 min Winter	39.389	0.089	0.0	0.1	0.1	3.3	O K
2880 min Winter	39.381	0.081	0.0	0.1	0.1	2.9	O K
4320 min Winter	39.368	0.068	0.0	0.1	0.1	2.1	O K
5760 min Winter	39.358	0.058	0.0	0.1	0.1	1.5	O K
7200 min Winter	39.349	0.049	0.0	0.1	0.1	1.1	O K
8640 min Winter	39.342	0.042	0.0	0.1	0.1	0.8	O K
10080 min Winter	39.336	0.036	0.0	0.1	0.1	0.6	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
30 min Winter	20.215	0.0	1.8	33
60 min Winter	12.800	0.0	2.5	62
120 min Winter	7.942	0.0	3.4	120
180 min Winter	5.979	0.0	3.9	178
240 min Winter	4.882	0.0	4.3	234
360 min Winter	3.646	0.0	4.9	344
480 min Winter	2.956	0.0	5.4	440
600 min Winter	2.511	0.0	5.7	472
720 min Winter	2.199	0.0	6.0	550
960 min Winter	1.782	0.0	6.5	704
1440 min Winter	1.326	0.0	7.2	1008
2160 min Winter	0.988	0.0	8.0	1428
2880 min Winter	0.800	0.0	8.5	1844
4320 min Winter	0.595	0.0	9.1	2596
5760 min Winter	0.483	0.0	9.5	3344
7200 min Winter	0.410	0.0	9.8	4040
8640 min Winter	0.359	0.0	9.9	4752
10080 min Winter	0.322	0.0	10.0	5440

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	1	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.033

Time (mins) From:	To:	Area (ha)
0	4	0.033

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Model Details

Storage is Online Cover Level (m) 40.000

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	6.0
Membrane Percolation (mm/hr)	1000	Length (m)	33.0
Max Percolation (l/s)	55.0	Slope (1:X)	500.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	39.300	Cap Volume Depth (m)	0.400

Orifice Outflow Control

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 39.300

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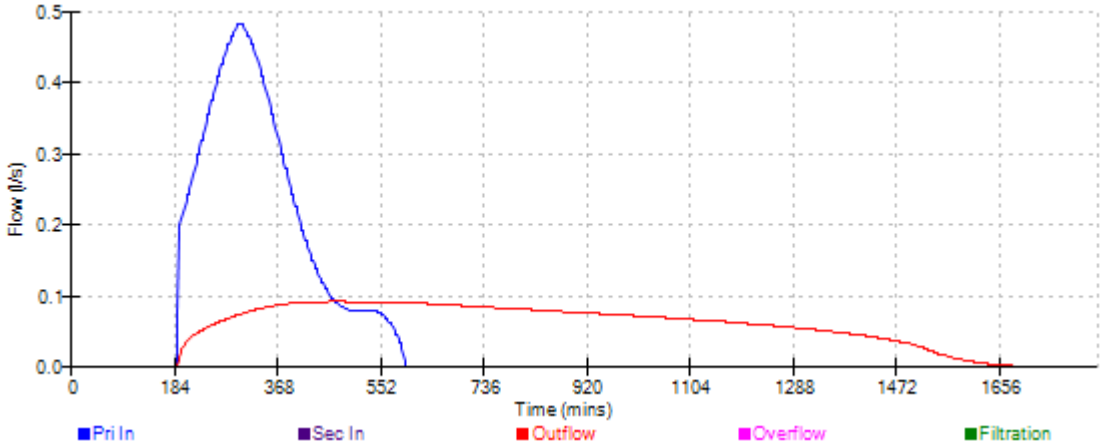
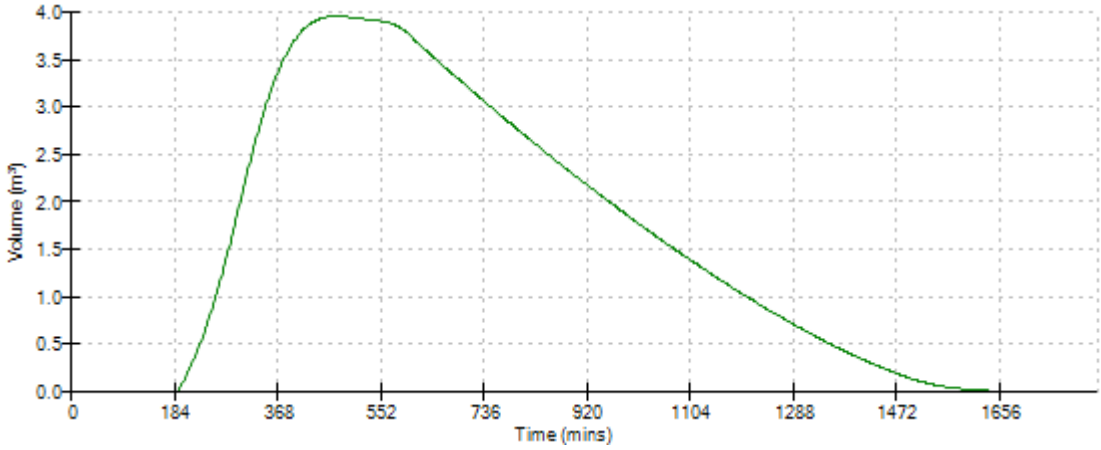
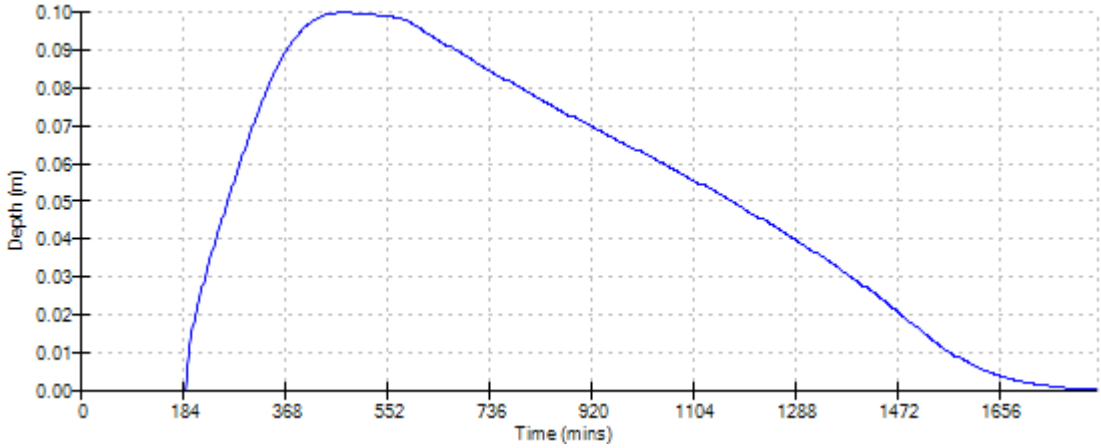
Event: 600 min Winter







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Summary of Results for 30 year Return Period

Half Drain Time : 760 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	39.394	0.094	0.0	0.1	0.1	3.7	O K
30 min Summer	39.417	0.117	0.0	0.1	0.1	5.0	O K
60 min Summer	39.440	0.140	0.0	0.1	0.1	6.4	O K
120 min Summer	39.462	0.162	0.0	0.1	0.1	7.7	O K
180 min Summer	39.473	0.173	0.0	0.1	0.1	8.3	O K
240 min Summer	39.480	0.180	0.0	0.1	0.1	8.7	O K
360 min Summer	39.486	0.186	0.0	0.1	0.1	9.1	O K
480 min Summer	39.489	0.189	0.0	0.1	0.1	9.3	O K
600 min Summer	39.489	0.189	0.0	0.1	0.1	9.3	O K
720 min Summer	39.489	0.189	0.0	0.1	0.1	9.3	O K
960 min Summer	39.488	0.188	0.0	0.1	0.1	9.2	O K
1440 min Summer	39.484	0.184	0.0	0.1	0.1	9.0	O K
2160 min Summer	39.475	0.175	0.0	0.1	0.1	8.4	O K
2880 min Summer	39.465	0.165	0.0	0.1	0.1	7.9	O K
4320 min Summer	39.447	0.147	0.0	0.1	0.1	6.8	O K
5760 min Summer	39.432	0.132	0.0	0.1	0.1	5.9	O K
7200 min Summer	39.419	0.119	0.0	0.1	0.1	5.1	O K
8640 min Summer	39.407	0.107	0.0	0.1	0.1	4.4	O K
10080 min Summer	39.398	0.098	0.0	0.1	0.1	3.9	O K
15 min Winter	39.404	0.104	0.0	0.1	0.1	4.2	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	76.035	0.0	3.7	19
30 min Summer	49.499	0.0	5.1	34
60 min Summer	30.811	0.0	6.6	64
120 min Summer	18.615	0.0	8.2	122
180 min Summer	13.715	0.0	9.1	182
240 min Summer	10.995	0.0	9.8	242
360 min Summer	8.034	0.0	10.8	360
480 min Summer	6.428	0.0	11.5	480
600 min Summer	5.404	0.0	12.1	548
720 min Summer	4.687	0.0	12.6	602
960 min Summer	3.743	0.0	13.4	722
1440 min Summer	2.723	0.0	14.3	994
2160 min Summer	1.979	0.0	15.8	1404
2880 min Summer	1.577	0.0	16.6	1816
4320 min Summer	1.143	0.0	17.6	2596
5760 min Summer	0.910	0.0	18.3	3400
7200 min Summer	0.762	0.0	18.7	4176
8640 min Summer	0.659	0.0	18.9	4920
10080 min Summer	0.583	0.0	19.1	5648
15 min Winter	76.035	0.0	4.3	19

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Summary of Results for 30 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
30 min Winter	39.430	0.130	0.0	0.1	0.1	5.7	O K
60 min Winter	39.455	0.155	0.0	0.1	0.1	7.3	O K
120 min Winter	39.480	0.180	0.0	0.1	0.1	8.7	O K
180 min Winter	39.493	0.193	0.0	0.1	0.1	9.5	O K
240 min Winter	39.501	0.201	0.0	0.1	0.1	10.0	O K
360 min Winter	39.509	0.209	0.0	0.1	0.1	10.5	O K
480 min Winter	39.513	0.213	0.0	0.1	0.1	10.7	O K
600 min Winter	39.514	0.214	0.0	0.1	0.1	10.8	O K
720 min Winter	39.514	0.214	0.0	0.1	0.1	10.7	O K
960 min Winter	39.511	0.211	0.0	0.1	0.1	10.6	O K
1440 min Winter	39.505	0.205	0.0	0.1	0.1	10.2	O K
2160 min Winter	39.492	0.192	0.0	0.1	0.1	9.4	O K
2880 min Winter	39.477	0.177	0.0	0.1	0.1	8.6	O K
4320 min Winter	39.451	0.151	0.0	0.1	0.1	7.0	O K
5760 min Winter	39.429	0.129	0.0	0.1	0.1	5.7	O K
7200 min Winter	39.412	0.112	0.0	0.1	0.1	4.7	O K
8640 min Winter	39.397	0.097	0.0	0.1	0.1	3.8	O K
10080 min Winter	39.385	0.085	0.0	0.1	0.1	3.1	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
30 min Winter	49.499	0.0	5.9	33
60 min Winter	30.811	0.0	7.5	62
120 min Winter	18.615	0.0	9.3	120
180 min Winter	13.715	0.0	10.3	180
240 min Winter	10.995	0.0	11.1	238
360 min Winter	8.034	0.0	12.2	352
480 min Winter	6.428	0.0	13.1	464
600 min Winter	5.404	0.0	13.7	572
720 min Winter	4.687	0.0	14.3	672
960 min Winter	3.743	0.0	15.2	760
1440 min Winter	2.723	0.0	15.6	1068
2160 min Winter	1.979	0.0	17.9	1516
2880 min Winter	1.577	0.0	18.8	1960
4320 min Winter	1.143	0.0	20.1	2808
5760 min Winter	0.910	0.0	20.9	3576
7200 min Winter	0.762	0.0	21.4	4328
8640 min Winter	0.659	0.0	21.8	5104
10080 min Winter	0.583	0.0	22.1	5848

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	30	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.033

Time (mins) From:	To:	Area (ha)
0	4	0.033

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Model Details

Storage is Online Cover Level (m) 40.000

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	6.0
Membrane Percolation (mm/hr)	1000	Length (m)	33.0
Max Percolation (l/s)	55.0	Slope (1:X)	500.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	39.300	Cap Volume Depth (m)	0.400

Orifice Outflow Control

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 39.300

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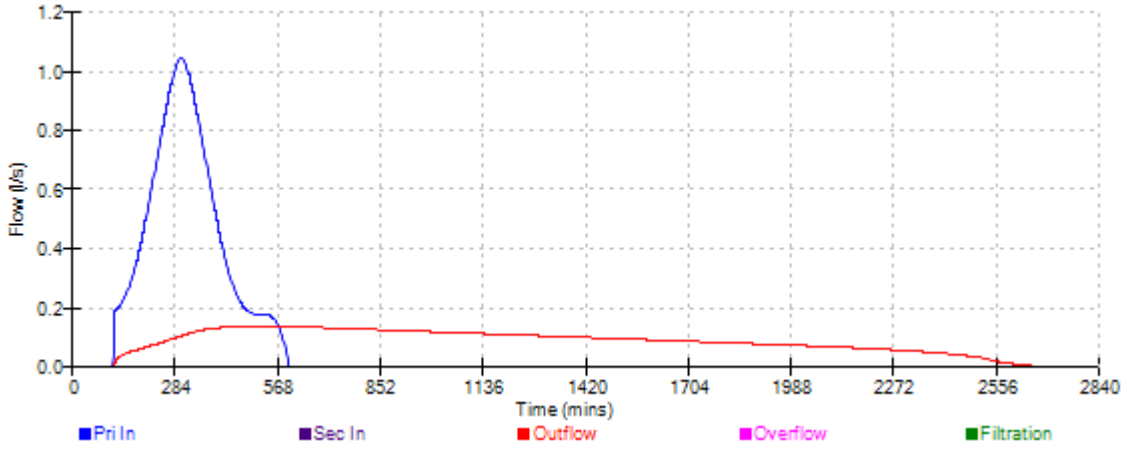
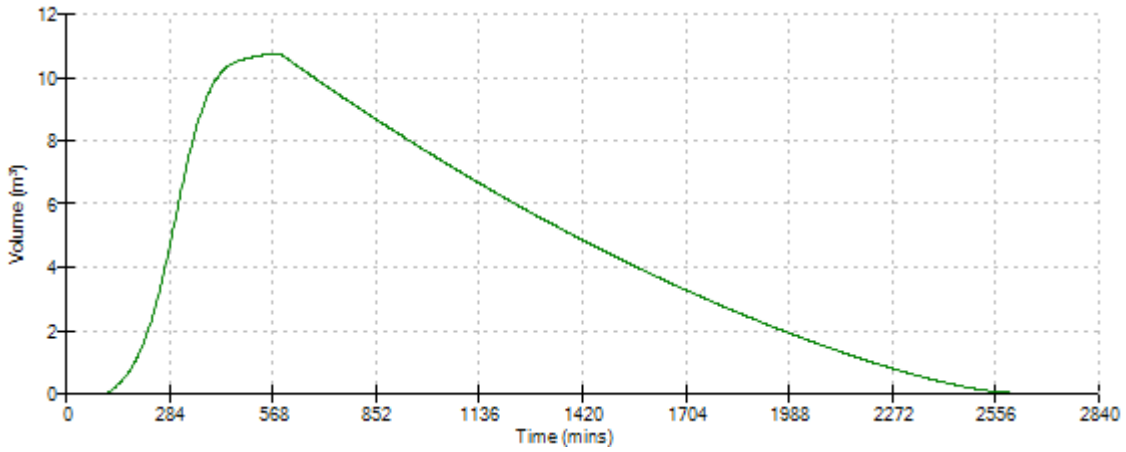
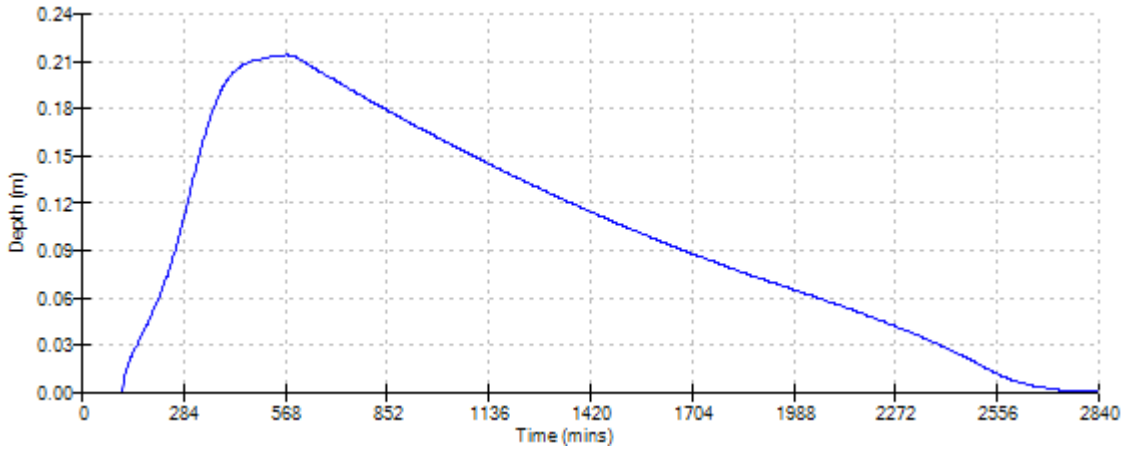
Event: 600 min Winter







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Summary of Results for 100 year Return Period

Half Drain Time : 891 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	39.418	0.118	0.0	0.1	0.1	5.0	O K
30 min Summer	39.449	0.149	0.0	0.1	0.1	6.9	O K
60 min Summer	39.480	0.180	0.0	0.1	0.1	8.7	O K
120 min Summer	39.509	0.209	0.0	0.1	0.1	10.5	O K
180 min Summer	39.524	0.224	0.0	0.1	0.1	11.3	O K
240 min Summer	39.532	0.232	0.0	0.1	0.1	11.8	O K
360 min Summer	39.541	0.241	0.0	0.1	0.1	12.4	O K
480 min Summer	39.545	0.245	0.0	0.1	0.1	12.6	O K
600 min Summer	39.546	0.246	0.0	0.1	0.1	12.6	O K
720 min Summer	39.545	0.245	0.0	0.1	0.1	12.6	O K
960 min Summer	39.543	0.243	0.0	0.1	0.1	12.5	O K
1440 min Summer	39.537	0.237	0.0	0.1	0.1	12.1	O K
2160 min Summer	39.526	0.226	0.0	0.1	0.1	11.4	O K
2880 min Summer	39.513	0.213	0.0	0.1	0.1	10.7	O K
4320 min Summer	39.490	0.190	0.0	0.1	0.1	9.3	O K
5760 min Summer	39.470	0.170	0.0	0.1	0.1	8.2	O K
7200 min Summer	39.454	0.154	0.0	0.1	0.1	7.2	O K
8640 min Summer	39.439	0.139	0.0	0.1	0.1	6.3	O K
10080 min Summer	39.427	0.127	0.0	0.1	0.1	5.6	O K
15 min Winter	39.430	0.130	0.0	0.1	0.1	5.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	98.681	0.0	5.1	19
30 min Summer	64.789	0.0	6.9	34
60 min Summer	40.510	0.0	9.0	64
120 min Summer	24.461	0.0	11.1	122
180 min Summer	17.964	0.0	12.3	182
240 min Summer	14.342	0.0	13.1	242
360 min Summer	10.418	0.0	14.3	362
480 min Summer	8.302	0.0	15.2	480
600 min Summer	6.956	0.0	16.0	598
720 min Summer	6.017	0.0	16.5	644
960 min Summer	4.784	0.0	17.0	762
1440 min Summer	3.456	0.0	17.1	1022
2160 min Summer	2.493	0.0	20.3	1428
2880 min Summer	1.975	0.0	21.3	1844
4320 min Summer	1.421	0.0	22.6	2640
5760 min Summer	1.124	0.0	23.3	3456
7200 min Summer	0.936	0.0	23.8	4184
8640 min Summer	0.806	0.0	24.2	4936
10080 min Summer	0.710	0.0	24.4	5656
15 min Winter	98.681	0.0	5.8	19

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Summary of Results for 100 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
30 min Winter	39.465	0.165	0.0	0.1	0.1	7.8	O K
60 min Winter	39.500	0.200	0.0	0.1	0.1	9.9	O K
120 min Winter	39.533	0.233	0.0	0.1	0.1	11.9	O K
180 min Winter	39.550	0.250	0.0	0.1	0.1	12.9	O K
240 min Winter	39.560	0.260	0.0	0.2	0.2	13.5	O K
360 min Winter	39.571	0.271	0.0	0.2	0.2	14.1	O K
480 min Winter	39.576	0.276	0.0	0.2	0.2	14.5	O K
600 min Winter	39.578	0.278	0.0	0.2	0.2	14.6	O K
720 min Winter	39.578	0.278	0.0	0.2	0.2	14.6	O K
960 min Winter	39.574	0.274	0.0	0.2	0.2	14.3	O K
1440 min Winter	39.566	0.266	0.0	0.2	0.2	13.9	O K
2160 min Winter	39.550	0.250	0.0	0.1	0.1	12.9	O K
2880 min Winter	39.532	0.232	0.0	0.1	0.1	11.8	O K
4320 min Winter	39.499	0.199	0.0	0.1	0.1	9.9	O K
5760 min Winter	39.472	0.172	0.0	0.1	0.1	8.2	O K
7200 min Winter	39.449	0.149	0.0	0.1	0.1	6.9	O K
8640 min Winter	39.430	0.130	0.0	0.1	0.1	5.8	O K
10080 min Winter	39.414	0.114	0.0	0.1	0.1	4.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
30 min Winter	64.789	0.0	7.5	33
60 min Winter	40.510	0.0	10.2	62
120 min Winter	24.461	0.0	12.5	122
180 min Winter	17.964	0.0	13.9	180
240 min Winter	14.342	0.0	14.8	238
360 min Winter	10.418	0.0	16.2	354
480 min Winter	8.302	0.0	17.2	466
600 min Winter	6.956	0.0	17.8	578
720 min Winter	6.017	0.0	18.1	684
960 min Winter	4.784	0.0	18.5	866
1440 min Winter	3.456	0.0	18.6	1094
2160 min Winter	2.493	0.0	23.0	1552
2880 min Winter	1.975	0.0	24.1	1988
4320 min Winter	1.421	0.0	25.6	2852
5760 min Winter	1.124	0.0	26.6	3640
7200 min Winter	0.936	0.0	27.2	4464
8640 min Winter	0.806	0.0	27.7	5192
10080 min Winter	0.710	0.0	28.0	5952

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.033

Time (mins) From:	To:	Area (ha)
0	4	0.033

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Model Details

Storage is Online Cover Level (m) 40.000

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	6.0
Membrane Percolation (mm/hr)	1000	Length (m)	33.0
Max Percolation (l/s)	55.0	Slope (1:X)	500.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	39.300	Cap Volume Depth (m)	0.400

Orifice Outflow Control

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 39.300

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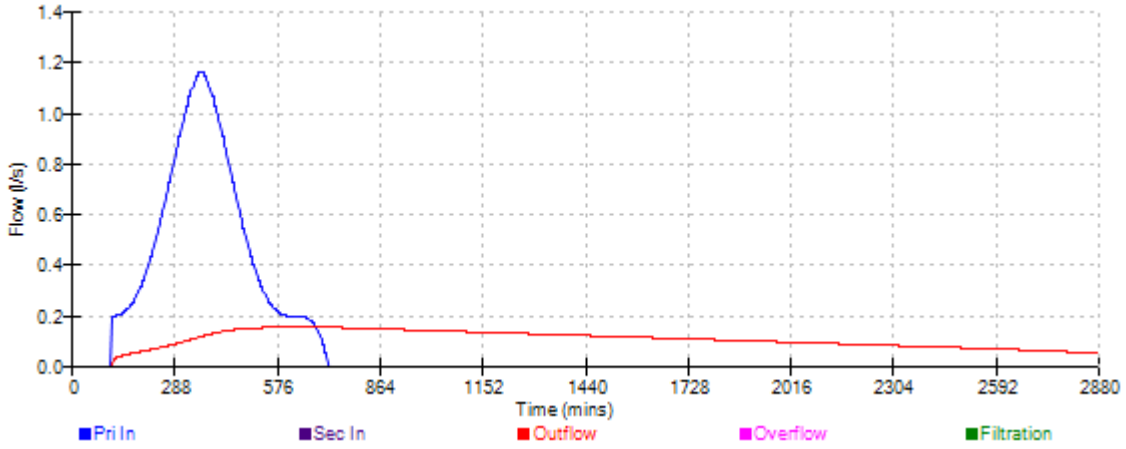
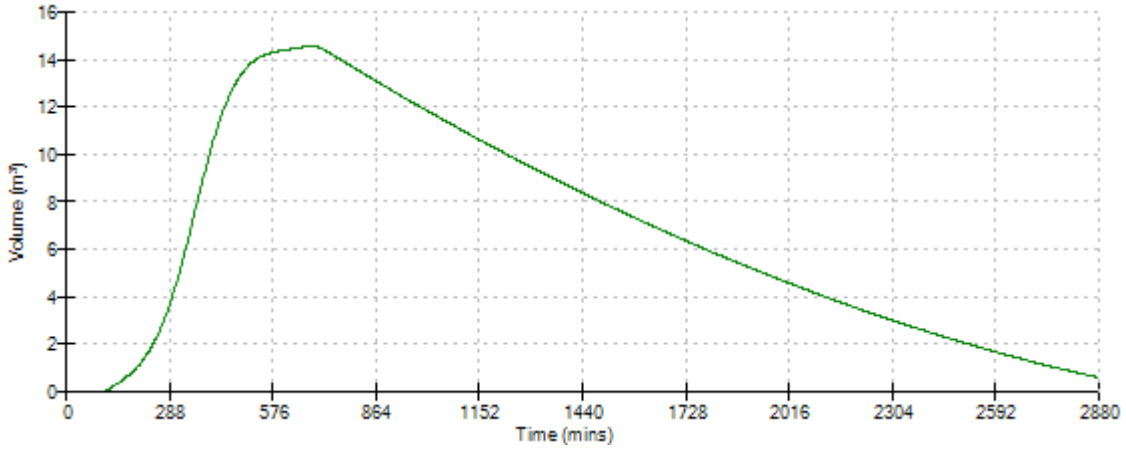
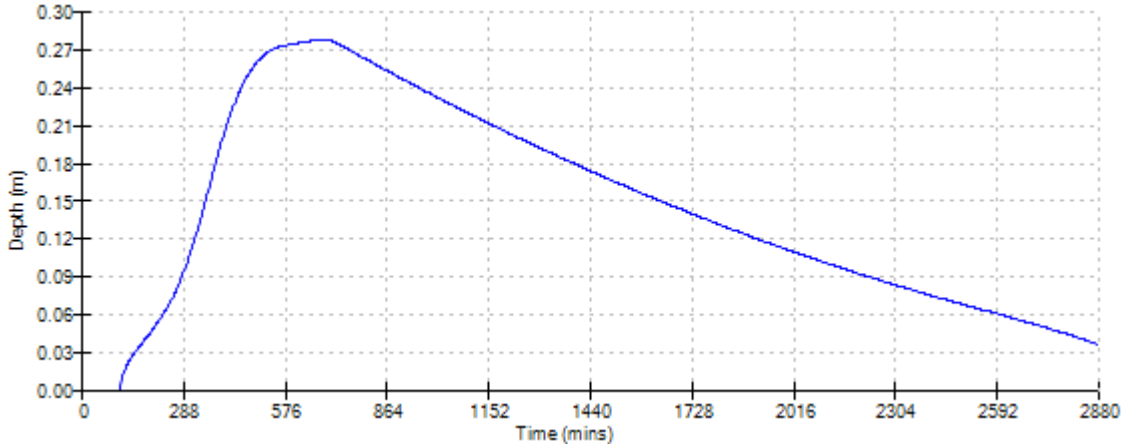
Event: 720 min Winter







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Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 1115 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	39.459	0.159	0.0	0.1	0.1	7.5	O K
30 min Summer	39.502	0.202	0.0	0.1	0.1	10.1	O K
60 min Summer	39.547	0.247	0.0	0.1	0.1	12.7	O K
120 min Summer	39.589	0.289	0.0	0.2	0.2	15.2	O K
180 min Summer	39.610	0.310	0.0	0.2	0.2	16.5	O K
240 min Summer	39.624	0.324	0.0	0.2	0.2	17.3	O K
360 min Summer	39.639	0.339	0.0	0.2	0.2	18.2	O K
480 min Summer	39.646	0.346	0.0	0.2	0.2	18.6	O K
600 min Summer	39.650	0.350	0.0	0.2	0.2	18.8	O K
720 min Summer	39.650	0.350	0.0	0.2	0.2	18.8	O K
960 min Summer	39.648	0.348	0.0	0.2	0.2	18.7	O K
1440 min Summer	39.642	0.342	0.0	0.2	0.2	18.3	O K
2160 min Summer	39.629	0.329	0.0	0.2	0.2	17.6	O K
2880 min Summer	39.614	0.314	0.0	0.2	0.2	16.7	O K
4320 min Summer	39.585	0.285	0.0	0.2	0.2	15.0	O K
5760 min Summer	39.559	0.259	0.0	0.2	0.2	13.4	O K
7200 min Summer	39.536	0.236	0.0	0.1	0.1	12.1	O K
8640 min Summer	39.517	0.217	0.0	0.1	0.1	10.9	O K
10080 min Summer	39.500	0.200	0.0	0.1	0.1	9.9	O K
15 min Winter	39.476	0.176	0.0	0.1	0.1	8.5	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	138.153	0.0	7.3	19
30 min Summer	90.705	0.0	8.7	34
60 min Summer	56.713	0.0	13.0	64
120 min Summer	34.246	0.0	15.9	124
180 min Summer	25.149	0.0	17.6	182
240 min Summer	20.078	0.0	18.7	242
360 min Summer	14.585	0.0	19.9	362
480 min Summer	11.622	0.0	20.6	482
600 min Summer	9.738	0.0	21.0	600
720 min Summer	8.424	0.0	21.4	720
960 min Summer	6.697	0.0	21.7	826
1440 min Summer	4.839	0.0	21.6	1068
2160 min Summer	3.490	0.0	29.2	1472
2880 min Summer	2.766	0.0	30.7	1876
4320 min Summer	1.989	0.0	32.4	2720
5760 min Summer	1.573	0.0	34.0	3512
7200 min Summer	1.311	0.0	35.0	4320
8640 min Summer	1.129	0.0	35.7	5096
10080 min Summer	0.994	0.0	36.2	5848
15 min Winter	138.153	0.0	7.9	19

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
30 min Winter	39.525	0.225	0.0	0.1	0.1	11.4	O K
60 min Winter	39.574	0.274	0.0	0.2	0.2	14.3	O K
120 min Winter	39.622	0.322	0.0	0.2	0.2	17.2	O K
180 min Winter	39.647	0.347	0.0	0.2	0.2	18.7	O K
240 min Winter	39.662	0.362	0.0	0.2	0.2	19.6	O K
360 min Winter	39.681	0.381	0.0	0.2	0.2	20.6	O K
480 min Winter	39.691	0.391	0.0	0.2	0.2	21.2	O K
600 min Winter	39.696	0.396	0.0	0.2	0.2	21.5	O K
720 min Winter	39.698	0.398	0.0	0.2	0.2	21.7	O K
960 min Winter	39.696	0.396	0.0	0.2	0.2	21.6	O K
1440 min Winter	39.686	0.386	0.0	0.2	0.2	21.0	O K
2160 min Winter	39.668	0.368	0.0	0.2	0.2	19.9	O K
2880 min Winter	39.648	0.348	0.0	0.2	0.2	18.7	O K
4320 min Winter	39.606	0.306	0.0	0.2	0.2	16.2	O K
5760 min Winter	39.570	0.270	0.0	0.2	0.2	14.1	O K
7200 min Winter	39.538	0.238	0.0	0.1	0.1	12.2	O K
8640 min Winter	39.512	0.212	0.0	0.1	0.1	10.6	O K
10080 min Winter	39.489	0.189	0.0	0.1	0.1	9.3	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
30 min Winter	90.705	0.0	9.3	33
60 min Winter	56.713	0.0	14.7	62
120 min Winter	34.246	0.0	17.9	122
180 min Winter	25.149	0.0	19.6	180
240 min Winter	20.078	0.0	20.5	238
360 min Winter	14.585	0.0	21.6	354
480 min Winter	11.622	0.0	22.3	470
600 min Winter	9.738	0.0	22.8	582
720 min Winter	8.424	0.0	23.1	692
960 min Winter	6.697	0.0	23.5	904
1440 min Winter	4.839	0.0	23.4	1126
2160 min Winter	3.490	0.0	33.0	1584
2880 min Winter	2.766	0.0	34.6	2044
4320 min Winter	1.989	0.0	35.8	2900
5760 min Winter	1.573	0.0	38.5	3752
7200 min Winter	1.311	0.0	39.7	4544
8640 min Winter	1.129	0.0	40.5	5360
10080 min Winter	0.994	0.0	41.2	6144

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.033

Time (mins) From:	To:	Area (ha)
0	4	0.033

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Model Details

Storage is Online Cover Level (m) 40.000

Porous Car Park Structure

Infiltration Coefficient Base (m/hr)	0.00000	Width (m)	6.0
Membrane Percolation (mm/hr)	1000	Length (m)	33.0
Max Percolation (l/s)	55.0	Slope (1:X)	500.0
Safety Factor	2.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	39.300	Cap Volume Depth (m)	0.400

Orifice Outflow Control

Diameter (m) 0.012 Discharge Coefficient 0.600 Invert Level (m) 39.300

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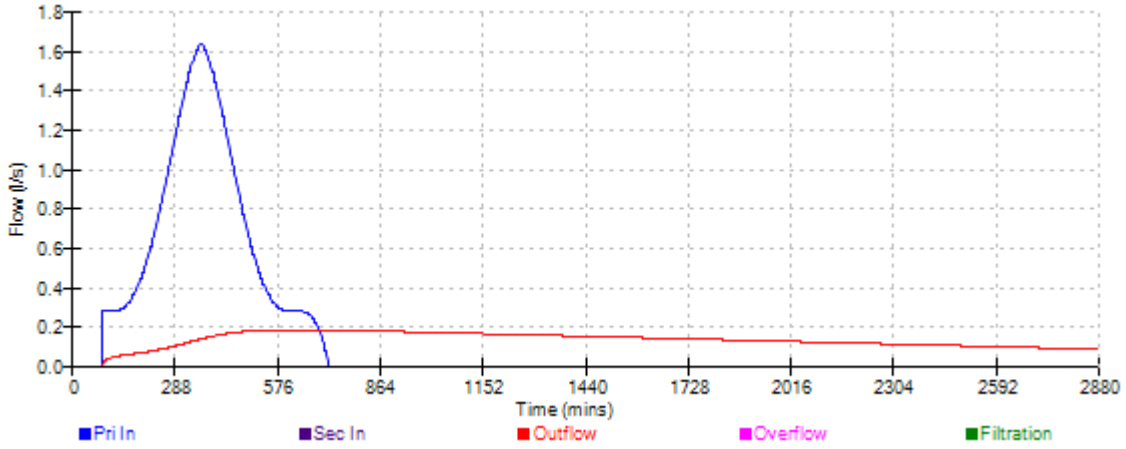
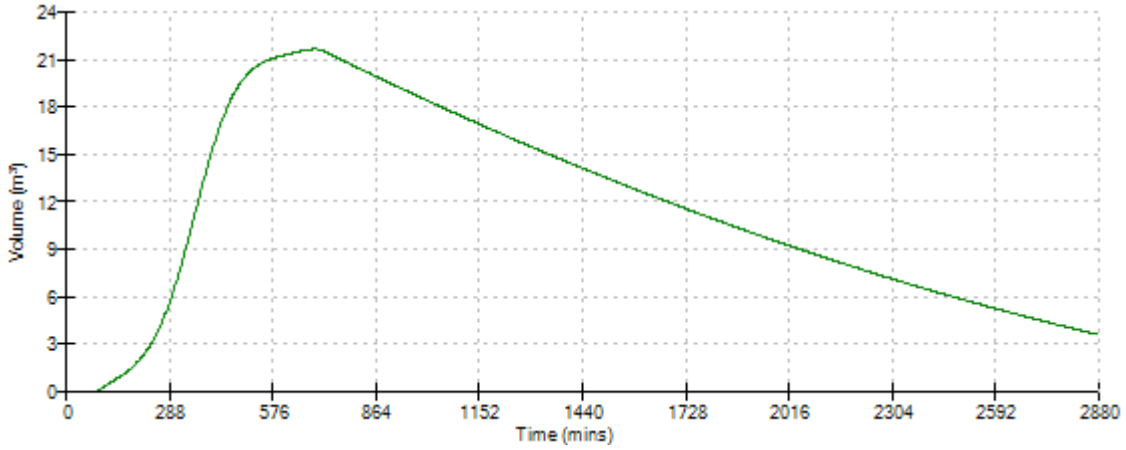
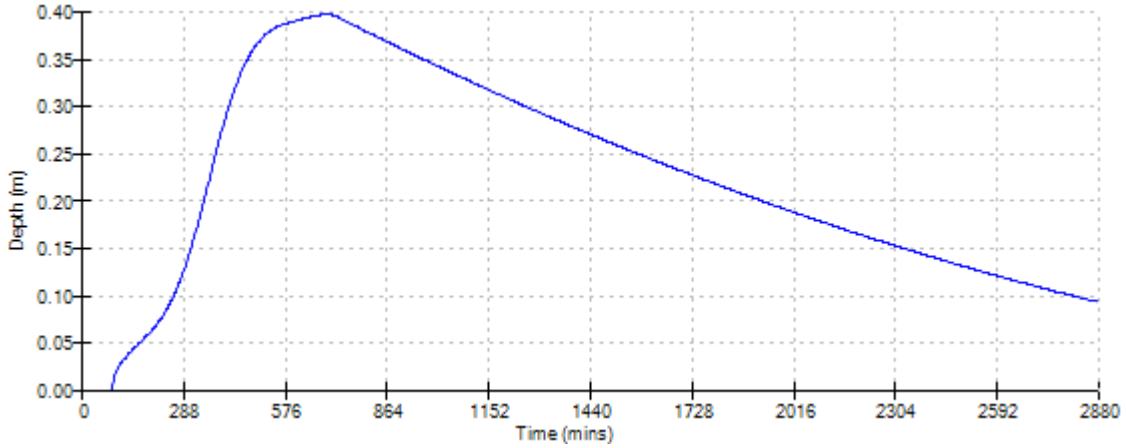
Event: 720 min Winter







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Summary of Results for 1 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer	59.806	0.006	0.0	1.9	Flood Risk
30 min Summer	59.807	0.007	0.0	2.5	Flood Risk
60 min Summer	59.809	0.009	0.0	3.1	Flood Risk
120 min Summer	59.811	0.011	0.0	3.8	Flood Risk
180 min Summer	59.813	0.013	0.1	4.2	Flood Risk
240 min Summer	59.813	0.013	0.1	4.4	Flood Risk
360 min Summer	59.814	0.014	0.1	4.8	Flood Risk
480 min Summer	59.815	0.015	0.1	4.9	Flood Risk
600 min Summer	59.815	0.015	0.1	5.0	Flood Risk
720 min Summer	59.815	0.015	0.1	5.1	Flood Risk
960 min Summer	59.816	0.016	0.1	5.2	Flood Risk
1440 min Summer	59.816	0.016	0.1	5.3	Flood Risk
2160 min Summer	59.816	0.016	0.1	5.4	Flood Risk
2880 min Summer	59.816	0.016	0.1	5.3	Flood Risk
4320 min Summer	59.815	0.015	0.1	5.1	Flood Risk
5760 min Summer	59.815	0.015	0.1	4.8	Flood Risk
7200 min Summer	59.814	0.014	0.1	4.6	Flood Risk
8640 min Summer	59.813	0.013	0.1	4.4	Flood Risk
10080 min Summer	59.813	0.013	0.1	4.2	Flood Risk
15 min Winter	59.806	0.006	0.0	2.1	Flood Risk
30 min Winter	59.808	0.008	0.0	2.8	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	30.991	0.0	1.2	19
30 min Summer	20.215	0.0	1.6	34
60 min Summer	12.800	0.0	2.8	64
120 min Summer	7.942	0.0	3.4	122
180 min Summer	5.979	0.0	3.9	182
240 min Summer	4.882	0.0	4.2	242
360 min Summer	3.646	0.0	4.7	362
480 min Summer	2.956	0.0	5.0	480
600 min Summer	2.511	0.0	5.3	560
720 min Summer	2.199	0.0	5.5	614
960 min Summer	1.782	0.0	5.8	732
1440 min Summer	1.326	0.0	6.2	994
2160 min Summer	0.988	0.0	8.5	1404
2880 min Summer	0.800	0.0	9.1	1816
4320 min Summer	0.595	0.0	9.7	2636
5760 min Summer	0.483	0.0	11.3	3400
7200 min Summer	0.410	0.0	12.0	4184
8640 min Summer	0.359	0.0	12.6	4928
10080 min Summer	0.322	0.0	13.0	5656
15 min Winter	30.991	0.0	1.4	19
30 min Winter	20.215	0.0	1.8	33

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Summary of Results for 1 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	59.811	0.011	0.0	3.5	Flood Risk
120 min Winter	59.813	0.013	0.1	4.2	Flood Risk
180 min Winter	59.814	0.014	0.1	4.7	Flood Risk
240 min Winter	59.815	0.015	0.1	5.0	Flood Risk
360 min Winter	59.816	0.016	0.1	5.3	Flood Risk
480 min Winter	59.817	0.017	0.1	5.6	Flood Risk
600 min Winter	59.817	0.017	0.1	5.7	Flood Risk
720 min Winter	59.817	0.017	0.1	5.7	Flood Risk
960 min Winter	59.818	0.018	0.1	5.8	Flood Risk
1440 min Winter	59.818	0.018	0.1	5.9	Flood Risk
2160 min Winter	59.818	0.018	0.1	5.9	Flood Risk
2880 min Winter	59.817	0.017	0.1	5.7	Flood Risk
4320 min Winter	59.816	0.016	0.1	5.3	Flood Risk
5760 min Winter	59.815	0.015	0.1	4.9	Flood Risk
7200 min Winter	59.814	0.014	0.1	4.5	Flood Risk
8640 min Winter	59.813	0.013	0.1	4.2	Flood Risk
10080 min Winter	59.812	0.012	0.0	4.0	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
60 min Winter	12.800	0.0	3.1	62
120 min Winter	7.942	0.0	3.8	122
180 min Winter	5.979	0.0	4.3	180
240 min Winter	4.882	0.0	4.7	238
360 min Winter	3.646	0.0	5.2	352
480 min Winter	2.956	0.0	5.6	464
600 min Winter	2.511	0.0	5.9	570
720 min Winter	2.199	0.0	6.1	670
960 min Winter	1.782	0.0	6.5	752
1440 min Winter	1.326	0.0	6.9	1066
2160 min Winter	0.988	0.0	9.5	1512
2880 min Winter	0.800	0.0	10.2	1936
4320 min Winter	0.595	0.0	10.8	2768
5760 min Winter	0.483	0.0	12.7	3584
7200 min Winter	0.410	0.0	13.5	4392
8640 min Winter	0.359	0.0	14.2	5184
10080 min Winter	0.322	0.0	14.6	5856

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	1	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.033

Time (mins) From:	To:	Area (ha)
0	4	0.033

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Model Details

Storage is Online Cover Level (m) 60.000

Tank or Pond Structure

Invert Level (m) 59.800

Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	330.0	0.200	330.0

Depth/Flow Relationship Outflow Control

Invert Level (m) 59.800

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	0.4000	0.200	0.4000

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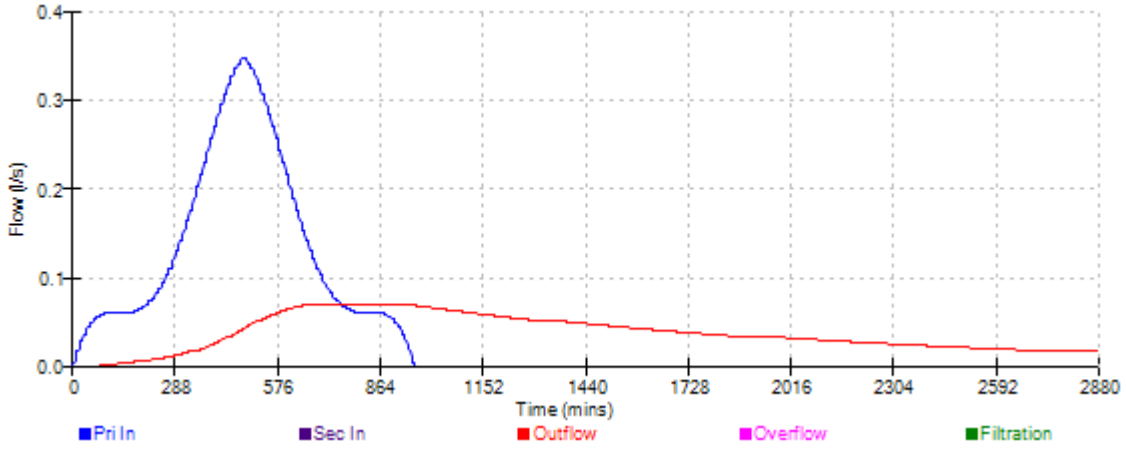
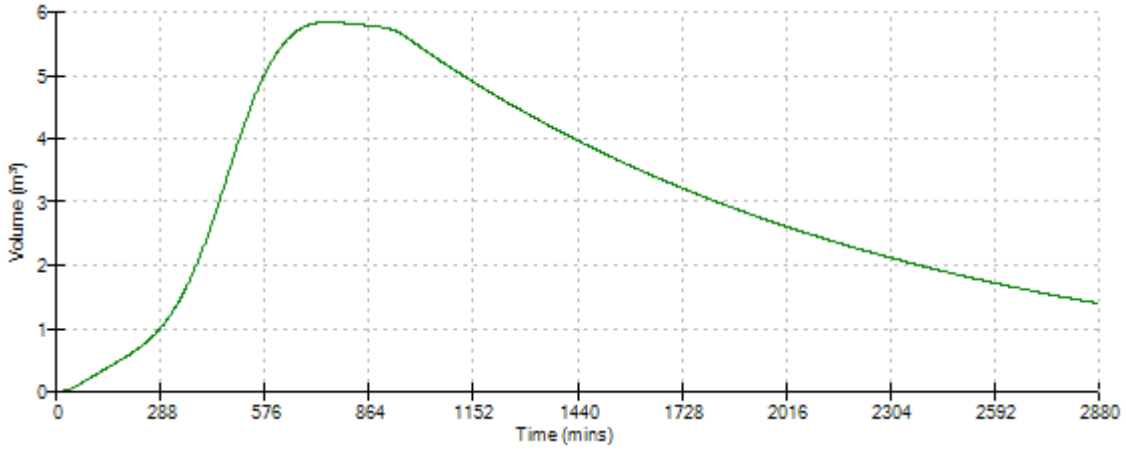
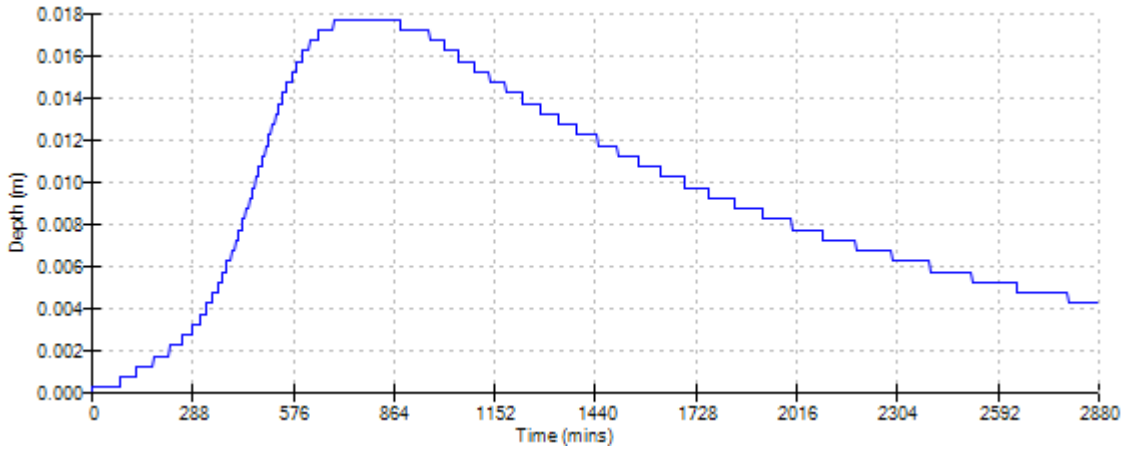
Event: 960 min Winter







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Summary of Results for 30 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer	59.814	0.014	0.1	4.7	Flood Risk
30 min Summer	59.818	0.018	0.1	6.1	Flood Risk
60 min Summer	59.823	0.023	0.1	7.5	Flood Risk
120 min Summer	59.827	0.027	0.1	8.8	Flood Risk
180 min Summer	59.829	0.029	0.1	9.5	Flood Risk
240 min Summer	59.830	0.030	0.1	10.0	Flood Risk
360 min Summer	59.832	0.032	0.1	10.5	Flood Risk
480 min Summer	59.832	0.032	0.1	10.7	Flood Risk
600 min Summer	59.833	0.033	0.1	10.8	Flood Risk
720 min Summer	59.833	0.033	0.1	10.9	Flood Risk
960 min Summer	59.833	0.033	0.1	11.0	Flood Risk
1440 min Summer	59.833	0.033	0.1	11.0	Flood Risk
2160 min Summer	59.833	0.033	0.1	10.8	Flood Risk
2880 min Summer	59.832	0.032	0.1	10.5	Flood Risk
4320 min Summer	59.830	0.030	0.1	9.8	Flood Risk
5760 min Summer	59.828	0.028	0.1	9.1	Flood Risk
7200 min Summer	59.826	0.026	0.1	8.6	Flood Risk
8640 min Summer	59.824	0.024	0.1	8.0	Flood Risk
10080 min Summer	59.823	0.023	0.1	7.6	Flood Risk
15 min Winter	59.816	0.016	0.1	5.2	Flood Risk
30 min Winter	59.821	0.021	0.1	6.8	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	76.035	0.0	3.0	19
30 min Summer	49.499	0.0	3.9	34
60 min Summer	30.811	0.0	6.7	64
120 min Summer	18.615	0.0	8.0	122
180 min Summer	13.715	0.0	8.8	182
240 min Summer	10.995	0.0	9.4	242
360 min Summer	8.034	0.0	10.3	362
480 min Summer	6.428	0.0	10.9	480
600 min Summer	5.404	0.0	11.3	560
720 min Summer	4.687	0.0	11.7	614
960 min Summer	3.743	0.0	12.2	730
1440 min Summer	2.723	0.0	12.7	994
2160 min Summer	1.979	0.0	17.0	1404
2880 min Summer	1.577	0.0	17.9	1816
4320 min Summer	1.143	0.0	18.6	2632
5760 min Summer	0.910	0.0	21.5	3400
7200 min Summer	0.762	0.0	22.5	4184
8640 min Summer	0.659	0.0	23.2	4928
10080 min Summer	0.583	0.0	23.6	5744
15 min Winter	76.035	0.0	3.4	19
30 min Winter	49.499	0.0	4.4	33

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Summary of Results for 30 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	59.825	0.025	0.1	8.3	Flood Risk
120 min Winter	59.830	0.030	0.1	9.9	Flood Risk
180 min Winter	59.832	0.032	0.1	10.7	Flood Risk
240 min Winter	59.834	0.034	0.1	11.2	Flood Risk
360 min Winter	59.836	0.036	0.1	11.8	Flood Risk
480 min Winter	59.837	0.037	0.1	12.1	Flood Risk
600 min Winter	59.837	0.037	0.1	12.2	Flood Risk
720 min Winter	59.837	0.037	0.1	12.2	Flood Risk
960 min Winter	59.837	0.037	0.1	12.3	Flood Risk
1440 min Winter	59.837	0.037	0.1	12.2	Flood Risk
2160 min Winter	59.836	0.036	0.1	11.7	Flood Risk
2880 min Winter	59.834	0.034	0.1	11.2	Flood Risk
4320 min Winter	59.831	0.031	0.1	10.2	Flood Risk
5760 min Winter	59.828	0.028	0.1	9.2	Flood Risk
7200 min Winter	59.826	0.026	0.1	8.4	Flood Risk
8640 min Winter	59.824	0.024	0.1	7.8	Flood Risk
10080 min Winter	59.822	0.022	0.1	7.2	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
60 min Winter	30.811	0.0	7.5	62
120 min Winter	18.615	0.0	9.0	122
180 min Winter	13.715	0.0	9.9	180
240 min Winter	10.995	0.0	10.6	238
360 min Winter	8.034	0.0	11.5	352
480 min Winter	6.428	0.0	12.2	462
600 min Winter	5.404	0.0	12.7	570
720 min Winter	4.687	0.0	13.1	670
960 min Winter	3.743	0.0	13.7	752
1440 min Winter	2.723	0.0	14.3	1056
2160 min Winter	1.979	0.0	19.1	1512
2880 min Winter	1.577	0.0	20.0	1956
4320 min Winter	1.143	0.0	20.8	2768
5760 min Winter	0.910	0.0	24.0	3584
7200 min Winter	0.762	0.0	25.2	4392
8640 min Winter	0.659	0.0	26.0	5184
10080 min Winter	0.583	0.0	26.5	5952

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	30	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.033

Time (mins) From:	To:	Area (ha)
0	4	0.033

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Model Details

Storage is Online Cover Level (m) 60.000

Tank or Pond Structure

Invert Level (m) 59.800

Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	330.0	0.200	330.0

Depth/Flow Relationship Outflow Control

Invert Level (m) 59.800

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	0.4000	0.200	0.4000

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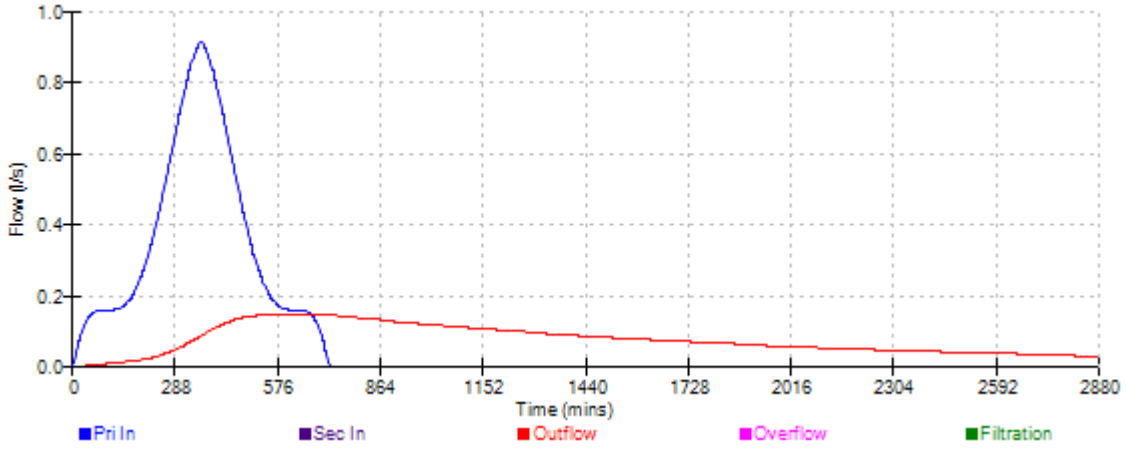
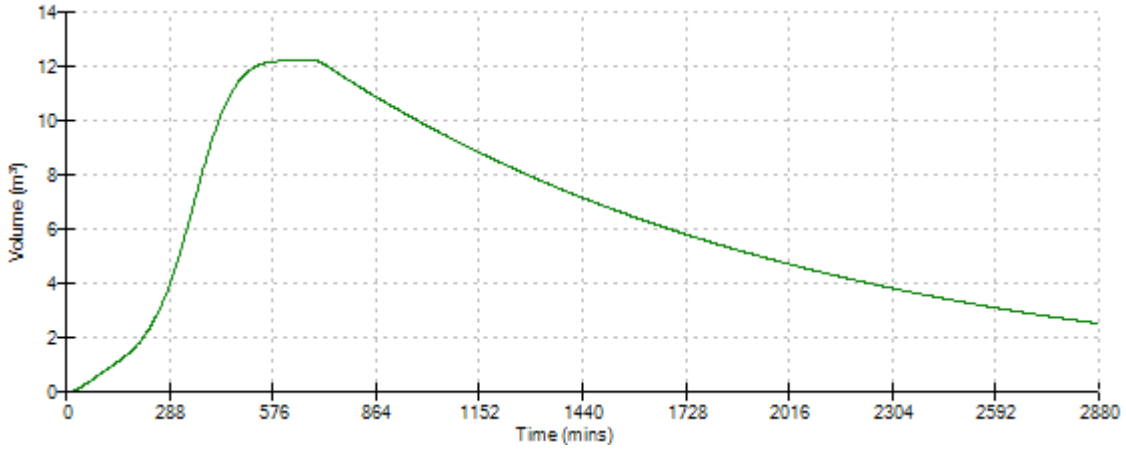
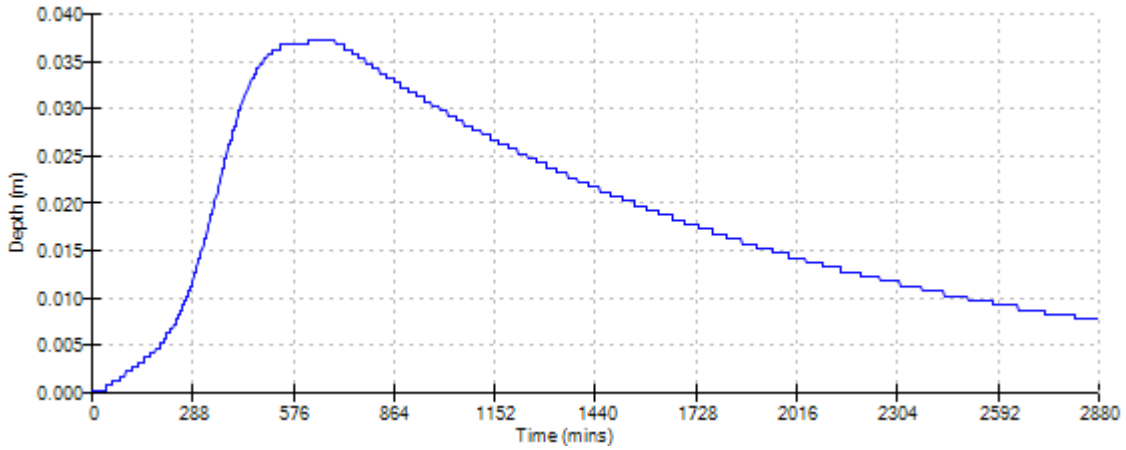
Event: 720 min Winter







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Summary of Results for 100 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer	59.818	0.018	0.1	6.1	Flood Risk
30 min Summer	59.824	0.024	0.1	7.9	Flood Risk
60 min Summer	59.830	0.030	0.1	9.8	Flood Risk
120 min Summer	59.835	0.035	0.1	11.6	Flood Risk
180 min Summer	59.838	0.038	0.2	12.5	Flood Risk
240 min Summer	59.839	0.039	0.2	13.0	Flood Risk
360 min Summer	59.841	0.041	0.2	13.6	Flood Risk
480 min Summer	59.842	0.042	0.2	13.8	Flood Risk
600 min Summer	59.842	0.042	0.2	13.9	Flood Risk
720 min Summer	59.842	0.042	0.2	14.0	Flood Risk
960 min Summer	59.842	0.042	0.2	14.0	Flood Risk
1440 min Summer	59.842	0.042	0.2	13.9	Flood Risk
2160 min Summer	59.841	0.041	0.2	13.6	Flood Risk
2880 min Summer	59.840	0.040	0.2	13.1	Flood Risk
4320 min Summer	59.837	0.037	0.1	12.2	Flood Risk
5760 min Summer	59.834	0.034	0.1	11.3	Flood Risk
7200 min Summer	59.832	0.032	0.1	10.5	Flood Risk
8640 min Summer	59.830	0.030	0.1	9.8	Flood Risk
10080 min Summer	59.828	0.028	0.1	9.2	Flood Risk
15 min Winter	59.821	0.021	0.1	6.8	Flood Risk
30 min Winter	59.827	0.027	0.1	8.9	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	98.681	0.0	3.9	19
30 min Summer	64.789	0.0	5.2	34
60 min Summer	40.510	0.0	8.8	64
120 min Summer	24.461	0.0	10.5	122
180 min Summer	17.964	0.0	11.6	182
240 min Summer	14.342	0.0	12.3	242
360 min Summer	10.418	0.0	13.3	362
480 min Summer	8.302	0.0	14.0	480
600 min Summer	6.956	0.0	14.6	560
720 min Summer	6.017	0.0	15.0	612
960 min Summer	4.784	0.0	15.6	732
1440 min Summer	3.456	0.0	16.2	994
2160 min Summer	2.493	0.0	21.4	1404
2880 min Summer	1.975	0.0	22.4	1816
4320 min Summer	1.421	0.0	23.1	2632
5760 min Summer	1.124	0.0	26.5	3400
7200 min Summer	0.936	0.0	27.6	4184
8640 min Summer	0.806	0.0	28.4	4928
10080 min Summer	0.710	0.0	28.8	5656
15 min Winter	98.681	0.0	4.4	19
30 min Winter	64.789	0.0	5.8	33

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Summary of Results for 100 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	59.833	0.033	0.1	11.0	Flood Risk
120 min Winter	59.839	0.039	0.2	13.0	Flood Risk
180 min Winter	59.842	0.042	0.2	14.0	Flood Risk
240 min Winter	59.844	0.044	0.2	14.6	Flood Risk
360 min Winter	59.846	0.046	0.2	15.3	Flood Risk
480 min Winter	59.847	0.047	0.2	15.6	Flood Risk
600 min Winter	59.848	0.048	0.2	15.7	Flood Risk
720 min Winter	59.848	0.048	0.2	15.7	Flood Risk
960 min Winter	59.848	0.048	0.2	15.7	Flood Risk
1440 min Winter	59.847	0.047	0.2	15.5	Flood Risk
2160 min Winter	59.845	0.045	0.2	14.8	Flood Risk
2880 min Winter	59.843	0.043	0.2	14.0	Flood Risk
4320 min Winter	59.838	0.038	0.2	12.6	Flood Risk
5760 min Winter	59.835	0.035	0.1	11.4	Flood Risk
7200 min Winter	59.831	0.031	0.1	10.4	Flood Risk
8640 min Winter	59.829	0.029	0.1	9.5	Flood Risk
10080 min Winter	59.827	0.027	0.1	8.8	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
60 min Winter	40.510	0.0	9.8	62
120 min Winter	24.461	0.0	11.8	122
180 min Winter	17.964	0.0	13.0	180
240 min Winter	14.342	0.0	13.8	238
360 min Winter	10.418	0.0	14.9	352
480 min Winter	8.302	0.0	15.7	462
600 min Winter	6.956	0.0	16.3	570
720 min Winter	6.017	0.0	16.8	670
960 min Winter	4.784	0.0	17.5	752
1440 min Winter	3.456	0.0	18.1	1056
2160 min Winter	2.493	0.0	24.0	1512
2880 min Winter	1.975	0.0	25.0	1936
4320 min Winter	1.421	0.0	25.9	2768
5760 min Winter	1.124	0.0	29.7	3576
7200 min Winter	0.936	0.0	31.0	4392
8640 min Winter	0.806	0.0	31.8	5184
10080 min Winter	0.710	0.0	32.3	5944

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.033

Time (mins) From:	To:	Area (ha)
0	4	0.033

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Model Details

Storage is Online Cover Level (m) 60.000

Tank or Pond Structure

Invert Level (m) 59.800

Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	330.0	0.200	330.0

Depth/Flow Relationship Outflow Control

Invert Level (m) 59.800

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	0.4000	0.200	0.4000

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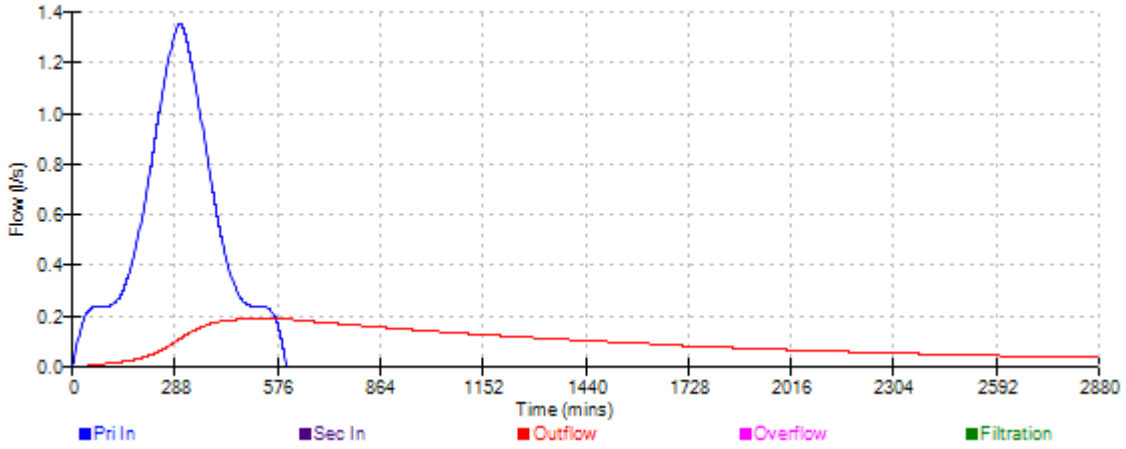
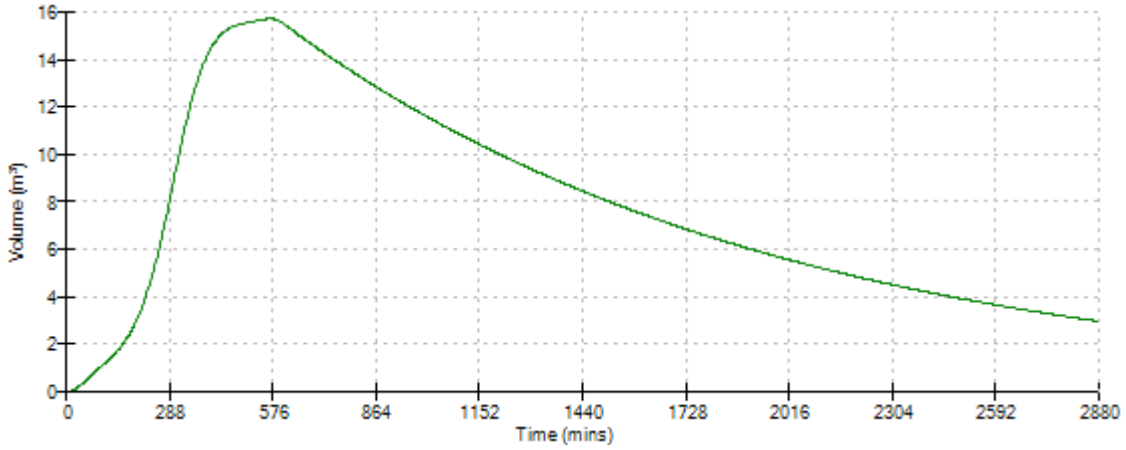
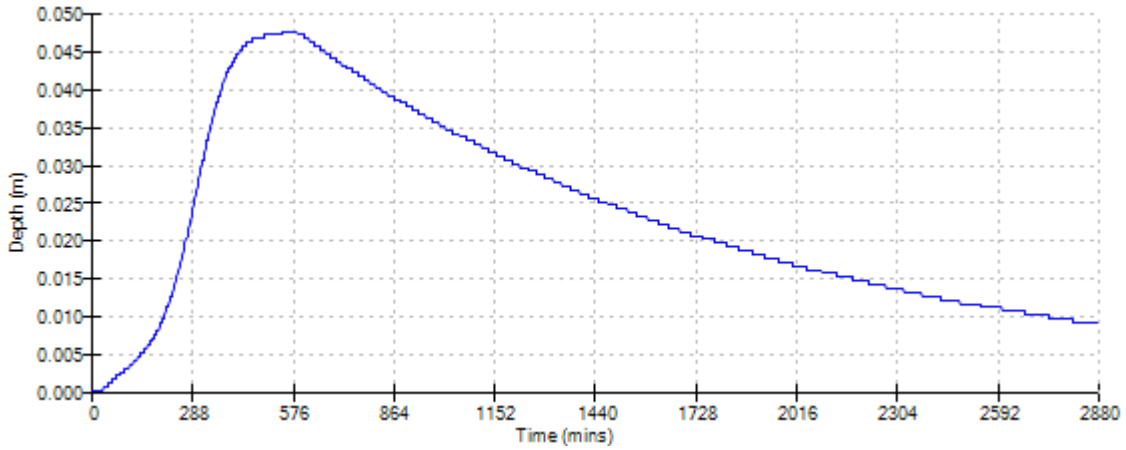
Event: 600 min Winter







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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer	59.826	0.026	0.1	8.5	Flood Risk
30 min Summer	59.834	0.034	0.1	11.1	Flood Risk
60 min Summer	59.842	0.042	0.2	13.7	Flood Risk
120 min Summer	59.849	0.049	0.2	16.2	Flood Risk
180 min Summer	59.853	0.053	0.2	17.5	Flood Risk
240 min Summer	59.855	0.055	0.2	18.2	Flood Risk
360 min Summer	59.858	0.058	0.2	19.0	Flood Risk
480 min Summer	59.859	0.059	0.2	19.4	Flood Risk
600 min Summer	59.859	0.059	0.2	19.5	Flood Risk
720 min Summer	59.859	0.059	0.2	19.5	Flood Risk
960 min Summer	59.859	0.059	0.2	19.6	Flood Risk
1440 min Summer	59.859	0.059	0.2	19.5	Flood Risk
2160 min Summer	59.858	0.058	0.2	19.0	Flood Risk
2880 min Summer	59.856	0.056	0.2	18.4	Flood Risk
4320 min Summer	59.852	0.052	0.2	17.0	Flood Risk
5760 min Summer	59.848	0.048	0.2	15.8	Flood Risk
7200 min Summer	59.845	0.045	0.2	14.7	Flood Risk
8640 min Summer	59.842	0.042	0.2	13.8	Flood Risk
10080 min Summer	59.839	0.039	0.2	12.9	Flood Risk
15 min Winter	59.829	0.029	0.1	9.5	Flood Risk
30 min Winter	59.838	0.038	0.2	12.4	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	138.153	0.0	5.5	19
30 min Summer	90.705	0.0	7.2	34
60 min Summer	56.713	0.0	12.3	64
120 min Summer	34.246	0.0	14.8	122
180 min Summer	25.149	0.0	16.2	182
240 min Summer	20.078	0.0	17.2	242
360 min Summer	14.585	0.0	18.6	362
480 min Summer	11.622	0.0	19.6	480
600 min Summer	9.738	0.0	20.4	560
720 min Summer	8.424	0.0	21.0	612
960 min Summer	6.697	0.0	21.8	732
1440 min Summer	4.839	0.0	22.6	994
2160 min Summer	3.490	0.0	30.0	1404
2880 min Summer	2.766	0.0	31.3	1816
4320 min Summer	1.989	0.0	32.4	2632
5760 min Summer	1.573	0.0	37.2	3408
7200 min Summer	1.311	0.0	38.7	4176
8640 min Summer	1.129	0.0	39.8	4928
10080 min Summer	0.994	0.0	40.3	5656
15 min Winter	138.153	0.0	6.2	19
30 min Winter	90.705	0.0	8.1	33

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	59.847	0.047	0.2	15.4	Flood Risk
120 min Winter	59.855	0.055	0.2	18.2	Flood Risk
180 min Winter	59.859	0.059	0.2	19.6	Flood Risk
240 min Winter	59.862	0.062	0.2	20.4	Flood Risk
360 min Winter	59.865	0.065	0.3	21.4	Flood Risk
480 min Winter	59.866	0.066	0.3	21.8	Flood Risk
600 min Winter	59.867	0.067	0.3	22.0	Flood Risk
720 min Winter	59.867	0.067	0.3	22.0	Flood Risk
960 min Winter	59.867	0.067	0.3	22.0	Flood Risk
1440 min Winter	59.866	0.066	0.3	21.6	Flood Risk
2160 min Winter	59.863	0.063	0.3	20.7	Flood Risk
2880 min Winter	59.860	0.060	0.2	19.7	Flood Risk
4320 min Winter	59.854	0.054	0.2	17.7	Flood Risk
5760 min Winter	59.848	0.048	0.2	16.0	Flood Risk
7200 min Winter	59.844	0.044	0.2	14.5	Flood Risk
8640 min Winter	59.840	0.040	0.2	13.3	Flood Risk
10080 min Winter	59.837	0.037	0.1	12.3	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
60 min Winter	56.713	0.0	13.7	62
120 min Winter	34.246	0.0	16.5	122
180 min Winter	25.149	0.0	18.2	180
240 min Winter	20.078	0.0	19.3	238
360 min Winter	14.585	0.0	20.8	352
480 min Winter	11.622	0.0	22.0	462
600 min Winter	9.738	0.0	22.8	570
720 min Winter	8.424	0.0	23.5	670
960 min Winter	6.697	0.0	24.5	752
1440 min Winter	4.839	0.0	25.4	1056
2160 min Winter	3.490	0.0	33.6	1512
2880 min Winter	2.766	0.0	35.1	1936
4320 min Winter	1.989	0.0	36.2	2768
5760 min Winter	1.573	0.0	41.7	3584
7200 min Winter	1.311	0.0	43.4	4392
8640 min Winter	1.129	0.0	44.5	5184
10080 min Winter	0.994	0.0	45.2	5944

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.033

Time (mins) From:	To:	Area (ha)
0	4	0.033

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Model Details

Storage is Online Cover Level (m) 60.000

Tank or Pond Structure

Invert Level (m) 59.800

Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	330.0	0.200	330.0

Depth/Flow Relationship Outflow Control

Invert Level (m) 59.800

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	0.4000	0.200	0.4000

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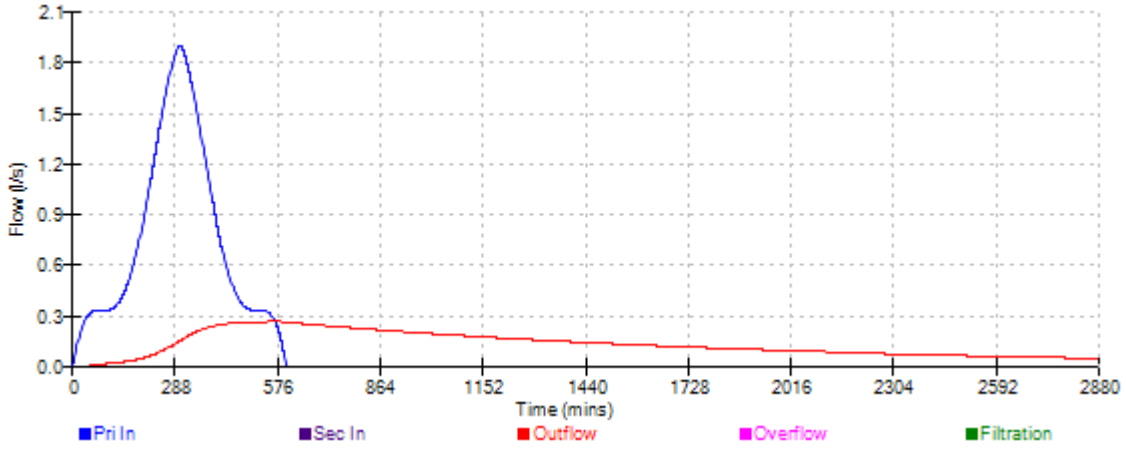
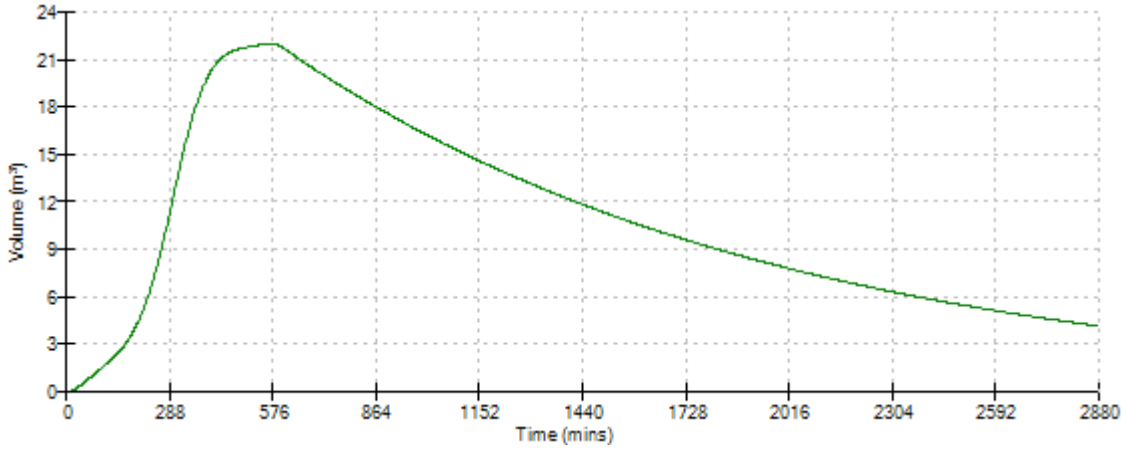
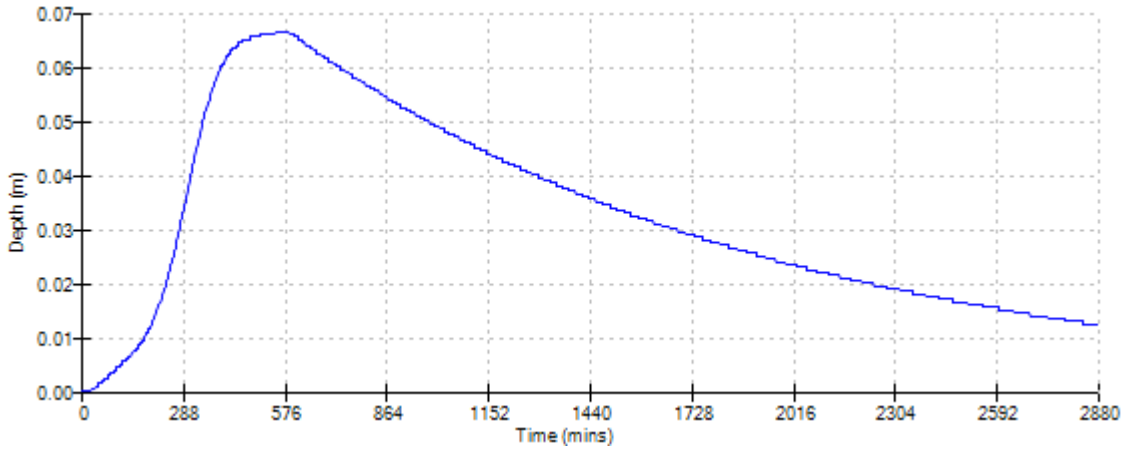
Event: 600 min Winter







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Summary of Results for 1 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer	59.806	0.006	0.0	5.3	Flood Risk
30 min Summer	59.808	0.008	0.0	6.9	Flood Risk
60 min Summer	59.810	0.010	0.0	8.8	Flood Risk
120 min Summer	59.812	0.012	0.0	10.8	Flood Risk
180 min Summer	59.813	0.013	0.1	12.1	Flood Risk
240 min Summer	59.814	0.014	0.1	13.1	Flood Risk
360 min Summer	59.816	0.016	0.1	14.4	Flood Risk
480 min Summer	59.817	0.017	0.1	15.3	Flood Risk
600 min Summer	59.817	0.017	0.1	16.0	Flood Risk
720 min Summer	59.818	0.018	0.1	16.6	Flood Risk
960 min Summer	59.819	0.019	0.1	17.4	Flood Risk
1440 min Summer	59.820	0.020	0.1	18.2	Flood Risk
2160 min Summer	59.821	0.021	0.1	18.9	Flood Risk
2880 min Summer	59.821	0.021	0.1	19.3	Flood Risk
4320 min Summer	59.821	0.021	0.1	19.7	Flood Risk
5760 min Summer	59.822	0.022	0.1	19.8	Flood Risk
7200 min Summer	59.821	0.021	0.1	19.7	Flood Risk
8640 min Summer	59.821	0.021	0.1	19.5	Flood Risk
10080 min Summer	59.821	0.021	0.1	19.2	Flood Risk
15 min Winter	59.806	0.006	0.0	6.0	Flood Risk
30 min Winter	59.808	0.008	0.0	7.8	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	30.991	0.0	1.7	19
30 min Summer	20.215	0.0	2.2	34
60 min Summer	12.800	0.0	4.6	64
120 min Summer	7.942	0.0	5.7	124
180 min Summer	5.979	0.0	6.4	184
240 min Summer	4.882	0.0	6.9	244
360 min Summer	3.646	0.0	7.6	362
480 min Summer	2.956	0.0	8.1	482
600 min Summer	2.511	0.0	8.5	602
720 min Summer	2.199	0.0	8.8	722
960 min Summer	1.782	0.0	9.1	962
1440 min Summer	1.326	0.0	9.4	1440
2160 min Summer	0.988	0.0	17.3	1772
2880 min Summer	0.800	0.0	17.8	2136
4320 min Summer	0.595	0.0	17.7	2940
5760 min Summer	0.483	0.0	28.5	3752
7200 min Summer	0.410	0.0	29.4	4608
8640 min Summer	0.359	0.0	29.7	5368
10080 min Summer	0.322	0.0	29.5	6248
15 min Winter	30.991	0.0	1.9	19
30 min Winter	20.215	0.0	2.4	34

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Summary of Results for 1 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	59.811	0.011	0.0	9.8	Flood Risk
120 min Winter	59.813	0.013	0.1	12.1	Flood Risk
180 min Winter	59.815	0.015	0.1	13.5	Flood Risk
240 min Winter	59.816	0.016	0.1	14.6	Flood Risk
360 min Winter	59.818	0.018	0.1	16.1	Flood Risk
480 min Winter	59.819	0.019	0.1	17.2	Flood Risk
600 min Winter	59.820	0.020	0.1	18.0	Flood Risk
720 min Winter	59.820	0.020	0.1	18.6	Flood Risk
960 min Winter	59.821	0.021	0.1	19.5	Flood Risk
1440 min Winter	59.822	0.022	0.1	20.6	Flood Risk
2160 min Winter	59.823	0.023	0.1	21.2	Flood Risk
2880 min Winter	59.823	0.023	0.1	21.6	Flood Risk
4320 min Winter	59.824	0.024	0.1	21.8	Flood Risk
5760 min Winter	59.824	0.024	0.1	21.6	Flood Risk
7200 min Winter	59.823	0.023	0.1	21.2	Flood Risk
8640 min Winter	59.823	0.023	0.1	20.7	Flood Risk
10080 min Winter	59.822	0.022	0.1	20.2	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
60 min Winter	12.800	0.0	5.2	64
120 min Winter	7.942	0.0	6.4	122
180 min Winter	5.979	0.0	7.2	182
240 min Winter	4.882	0.0	7.7	240
360 min Winter	3.646	0.0	8.5	358
480 min Winter	2.956	0.0	9.1	476
600 min Winter	2.511	0.0	9.5	592
720 min Winter	2.199	0.0	9.8	708
960 min Winter	1.782	0.0	10.2	934
1440 min Winter	1.326	0.0	10.6	1382
2160 min Winter	0.988	0.0	19.3	1948
2880 min Winter	0.800	0.0	20.0	2224
4320 min Winter	0.595	0.0	19.9	3152
5760 min Winter	0.483	0.0	31.9	4040
7200 min Winter	0.410	0.0	32.9	4904
8640 min Winter	0.359	0.0	33.3	5792
10080 min Winter	0.322	0.0	33.0	6656

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	1	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.092

Time (mins) From:	To:	Area (ha)
0	4	0.092

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Model Details

Storage is Online Cover Level (m) 60.000

Tank or Pond Structure

Invert Level (m) 59.800

Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	920.0	0.200	920.0

Depth/Flow Relationship Outflow Control

Invert Level (m) 59.800

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	0.4000	0.200	0.4000

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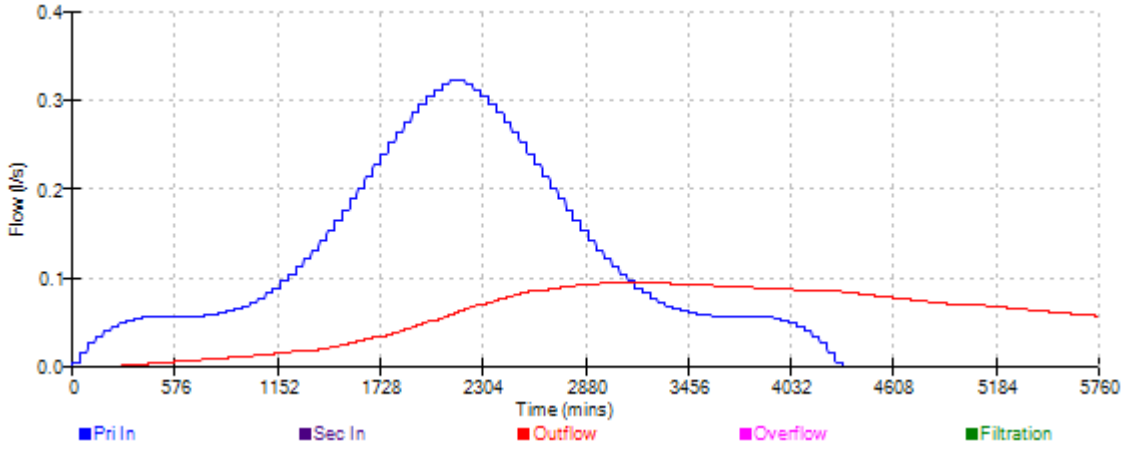
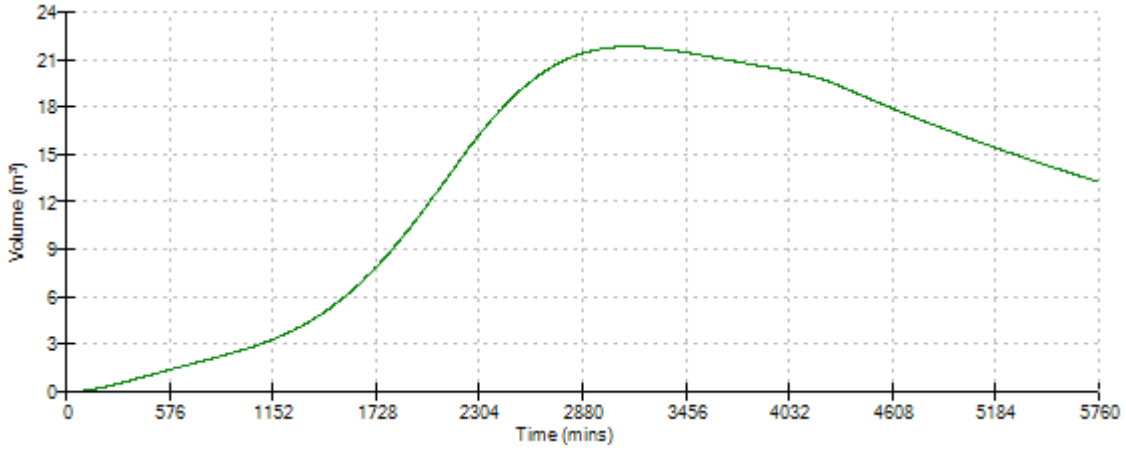
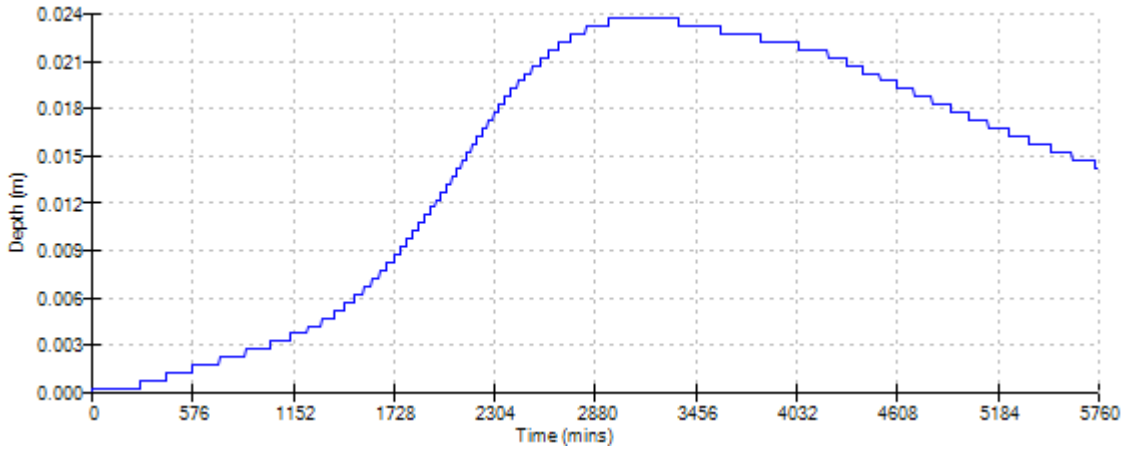
Event: 4320 min Winter







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Summary of Results for 30 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer	59.814	0.014	0.1	13.1	Flood Risk
30 min Summer	59.818	0.018	0.1	17.0	Flood Risk
60 min Summer	59.823	0.023	0.1	21.1	Flood Risk
120 min Summer	59.827	0.027	0.1	25.3	Flood Risk
180 min Summer	59.830	0.030	0.1	27.7	Flood Risk
240 min Summer	59.832	0.032	0.1	29.4	Flood Risk
360 min Summer	59.834	0.034	0.1	31.7	Flood Risk
480 min Summer	59.836	0.036	0.1	33.3	Flood Risk
600 min Summer	59.837	0.037	0.1	34.5	Flood Risk
720 min Summer	59.838	0.038	0.2	35.3	Flood Risk
960 min Summer	59.840	0.040	0.2	36.5	Flood Risk
1440 min Summer	59.841	0.041	0.2	37.5	Flood Risk
2160 min Summer	59.841	0.041	0.2	37.9	Flood Risk
2880 min Summer	59.841	0.041	0.2	38.0	Flood Risk
4320 min Summer	59.841	0.041	0.2	37.9	Flood Risk
5760 min Summer	59.841	0.041	0.2	37.3	Flood Risk
7200 min Summer	59.840	0.040	0.2	36.6	Flood Risk
8640 min Summer	59.839	0.039	0.2	35.7	Flood Risk
10080 min Summer	59.838	0.038	0.2	34.9	Flood Risk
15 min Winter	59.816	0.016	0.1	14.7	Flood Risk
30 min Winter	59.821	0.021	0.1	19.0	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	76.035	0.0	4.1	19
30 min Summer	49.499	0.0	5.3	34
60 min Summer	30.811	0.0	11.2	64
120 min Summer	18.615	0.0	13.4	124
180 min Summer	13.715	0.0	14.7	184
240 min Summer	10.995	0.0	15.6	244
360 min Summer	8.034	0.0	16.8	362
480 min Summer	6.428	0.0	17.7	482
600 min Summer	5.404	0.0	18.2	602
720 min Summer	4.687	0.0	18.7	722
960 min Summer	3.743	0.0	19.2	962
1440 min Summer	2.723	0.0	19.4	1440
2160 min Summer	1.979	0.0	34.6	1772
2880 min Summer	1.577	0.0	35.1	2136
4320 min Summer	1.143	0.0	34.1	2940
5760 min Summer	0.910	0.0	53.7	3752
7200 min Summer	0.762	0.0	54.6	4608
8640 min Summer	0.659	0.0	54.5	5440
10080 min Summer	0.583	0.0	53.4	6248
15 min Winter	76.035	0.0	4.6	19
30 min Winter	49.499	0.0	5.9	34

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Summary of Results for 30 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	59.826	0.026	0.1	23.6	Flood Risk
120 min Winter	59.831	0.031	0.1	28.3	Flood Risk
180 min Winter	59.834	0.034	0.1	31.1	Flood Risk
240 min Winter	59.836	0.036	0.1	32.9	Flood Risk
360 min Winter	59.839	0.039	0.2	35.6	Flood Risk
480 min Winter	59.841	0.041	0.2	37.4	Flood Risk
600 min Winter	59.842	0.042	0.2	38.7	Flood Risk
720 min Winter	59.843	0.043	0.2	39.7	Flood Risk
960 min Winter	59.845	0.045	0.2	41.0	Flood Risk
1440 min Winter	59.846	0.046	0.2	42.3	Flood Risk
2160 min Winter	59.846	0.046	0.2	42.5	Flood Risk
2880 min Winter	59.846	0.046	0.2	42.6	Flood Risk
4320 min Winter	59.846	0.046	0.2	41.9	Flood Risk
5760 min Winter	59.844	0.044	0.2	40.8	Flood Risk
7200 min Winter	59.843	0.043	0.2	39.4	Flood Risk
8640 min Winter	59.841	0.041	0.2	38.0	Flood Risk
10080 min Winter	59.840	0.040	0.2	36.7	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
60 min Winter	30.811	0.0	12.5	64
120 min Winter	18.615	0.0	15.0	122
180 min Winter	13.715	0.0	16.4	182
240 min Winter	10.995	0.0	17.4	240
360 min Winter	8.034	0.0	18.8	358
480 min Winter	6.428	0.0	19.8	476
600 min Winter	5.404	0.0	20.4	592
720 min Winter	4.687	0.0	20.9	708
960 min Winter	3.743	0.0	21.5	934
1440 min Winter	2.723	0.0	21.7	1382
2160 min Winter	1.979	0.0	38.7	1968
2880 min Winter	1.577	0.0	39.3	2220
4320 min Winter	1.143	0.0	38.1	3152
5760 min Winter	0.910	0.0	60.1	4040
7200 min Winter	0.762	0.0	61.1	4904
8640 min Winter	0.659	0.0	61.0	5792
10080 min Winter	0.583	0.0	59.7	6656

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	30	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.092

Time (mins) From:	To:	Area (ha)
0	4	0.092

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Model Details

Storage is Online Cover Level (m) 60.000

Tank or Pond Structure

Invert Level (m) 59.800

Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	920.0	0.200	920.0

Depth/Flow Relationship Outflow Control

Invert Level (m) 59.800

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	0.4000	0.200	0.4000

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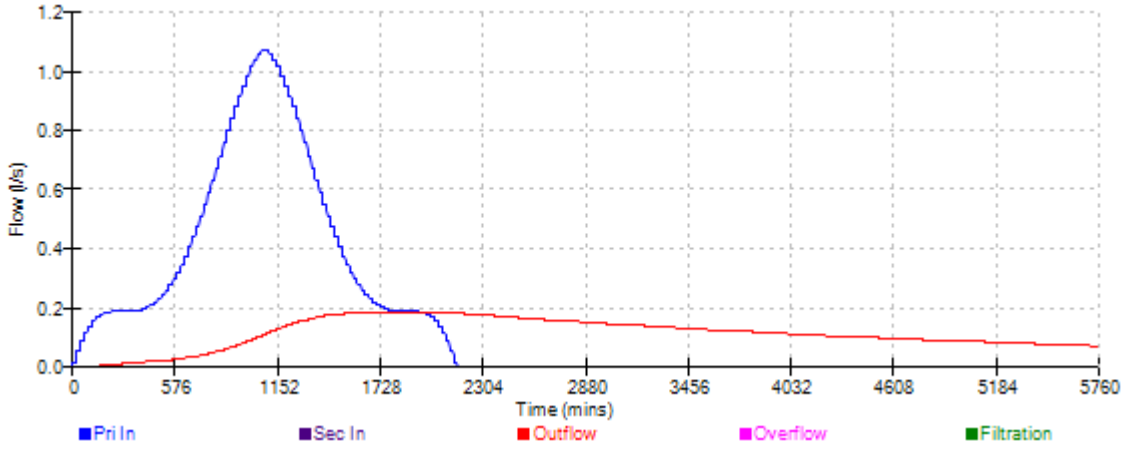
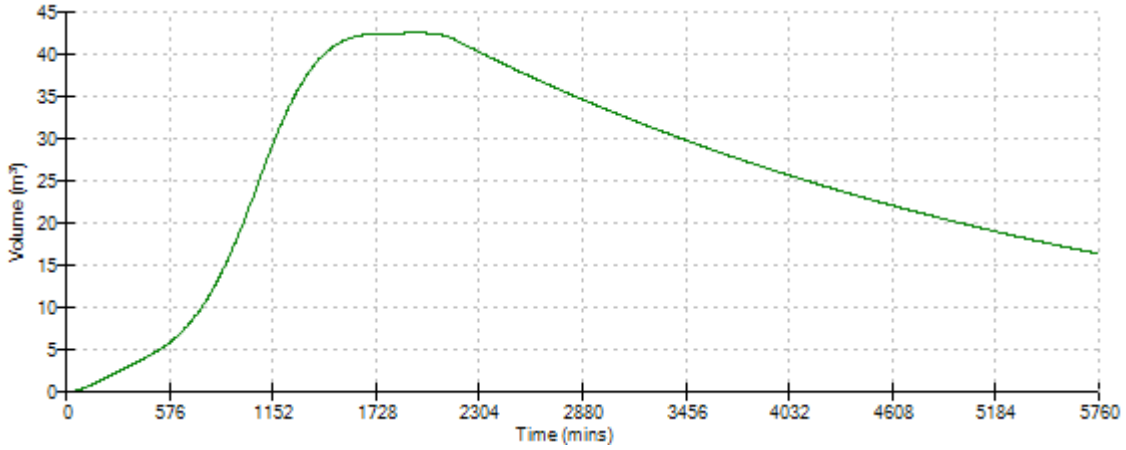
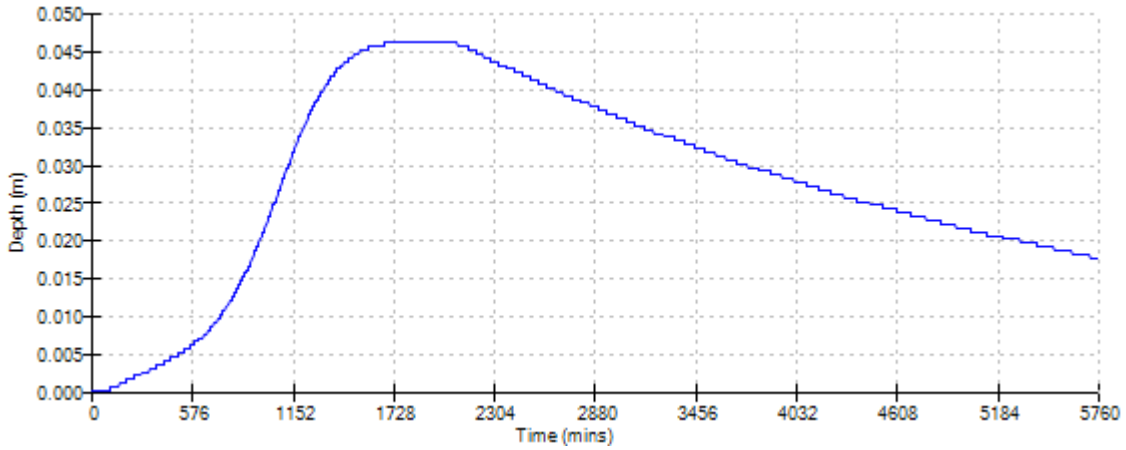
Event: 2160 min Winter







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Summary of Results for 100 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer	59.818	0.018	0.1	17.0	Flood Risk
30 min Summer	59.824	0.024	0.1	22.3	Flood Risk
60 min Summer	59.830	0.030	0.1	27.7	Flood Risk
120 min Summer	59.836	0.036	0.1	33.2	Flood Risk
180 min Summer	59.839	0.039	0.2	36.3	Flood Risk
240 min Summer	59.842	0.042	0.2	38.3	Flood Risk
360 min Summer	59.845	0.045	0.2	41.1	Flood Risk
480 min Summer	59.847	0.047	0.2	43.0	Flood Risk
600 min Summer	59.848	0.048	0.2	44.4	Flood Risk
720 min Summer	59.849	0.049	0.2	45.4	Flood Risk
960 min Summer	59.851	0.051	0.2	46.6	Flood Risk
1440 min Summer	59.852	0.052	0.2	47.6	Flood Risk
2160 min Summer	59.852	0.052	0.2	47.7	Flood Risk
2880 min Summer	59.852	0.052	0.2	47.7	Flood Risk
4320 min Summer	59.851	0.051	0.2	47.1	Flood Risk
5760 min Summer	59.850	0.050	0.2	46.1	Flood Risk
7200 min Summer	59.849	0.049	0.2	45.0	Flood Risk
8640 min Summer	59.848	0.048	0.2	43.7	Flood Risk
10080 min Summer	59.846	0.046	0.2	42.5	Flood Risk
15 min Winter	59.821	0.021	0.1	19.0	Flood Risk
30 min Winter	59.827	0.027	0.1	24.9	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	98.681	0.0	5.3	19
30 min Summer	64.789	0.0	6.9	34
60 min Summer	40.510	0.0	14.7	64
120 min Summer	24.461	0.0	17.6	124
180 min Summer	17.964	0.0	19.2	184
240 min Summer	14.342	0.0	20.3	244
360 min Summer	10.418	0.0	21.8	362
480 min Summer	8.302	0.0	22.8	482
600 min Summer	6.956	0.0	23.5	602
720 min Summer	6.017	0.0	24.0	722
960 min Summer	4.784	0.0	24.5	962
1440 min Summer	3.456	0.0	24.6	1440
2160 min Summer	2.493	0.0	43.6	1776
2880 min Summer	1.975	0.0	44.0	2136
4320 min Summer	1.421	0.0	42.4	2940
5760 min Summer	1.124	0.0	66.3	3752
7200 min Summer	0.936	0.0	67.0	4608
8640 min Summer	0.806	0.0	66.7	5368
10080 min Summer	0.710	0.0	65.1	6248
15 min Winter	98.681	0.0	5.9	19
30 min Winter	64.789	0.0	7.8	34

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Summary of Results for 100 year Return Period

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	59.834	0.034	0.1	31.0	Flood Risk
120 min Winter	59.840	0.040	0.2	37.2	Flood Risk
180 min Winter	59.844	0.044	0.2	40.7	Flood Risk
240 min Winter	59.847	0.047	0.2	43.0	Flood Risk
360 min Winter	59.850	0.050	0.2	46.1	Flood Risk
480 min Winter	59.852	0.052	0.2	48.3	Flood Risk
600 min Winter	59.854	0.054	0.2	49.8	Flood Risk
720 min Winter	59.855	0.055	0.2	50.9	Flood Risk
960 min Winter	59.857	0.057	0.2	52.4	Flood Risk
1440 min Winter	59.858	0.058	0.2	53.7	Flood Risk
2160 min Winter	59.858	0.058	0.2	53.6	Flood Risk
2880 min Winter	59.858	0.058	0.2	53.3	Flood Risk
4320 min Winter	59.857	0.057	0.2	52.1	Flood Risk
5760 min Winter	59.855	0.055	0.2	50.3	Flood Risk
7200 min Winter	59.853	0.053	0.2	48.4	Flood Risk
8640 min Winter	59.851	0.051	0.2	46.5	Flood Risk
10080 min Winter	59.849	0.049	0.2	44.7	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
60 min Winter	40.510	0.0	16.4	64
120 min Winter	24.461	0.0	19.7	122
180 min Winter	17.964	0.0	21.5	182
240 min Winter	14.342	0.0	22.7	240
360 min Winter	10.418	0.0	24.4	358
480 min Winter	8.302	0.0	25.5	476
600 min Winter	6.956	0.0	26.3	592
720 min Winter	6.017	0.0	26.9	708
960 min Winter	4.784	0.0	27.5	934
1440 min Winter	3.456	0.0	27.5	1382
2160 min Winter	2.493	0.0	48.8	1968
2880 min Winter	1.975	0.0	49.3	2220
4320 min Winter	1.421	0.0	47.4	3152
5760 min Winter	1.124	0.0	74.2	4040
7200 min Winter	0.936	0.0	75.1	4904
8640 min Winter	0.806	0.0	74.6	5792
10080 min Winter	0.710	0.0	72.8	6648

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.092

Time (mins) From:	To:	Area (ha)
0	4	0.092

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Model Details

Storage is Online Cover Level (m) 60.000

Tank or Pond Structure

Invert Level (m) 59.800

Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	920.0	0.200	920.0

Depth/Flow Relationship Outflow Control

Invert Level (m) 59.800

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	0.4000	0.200	0.4000

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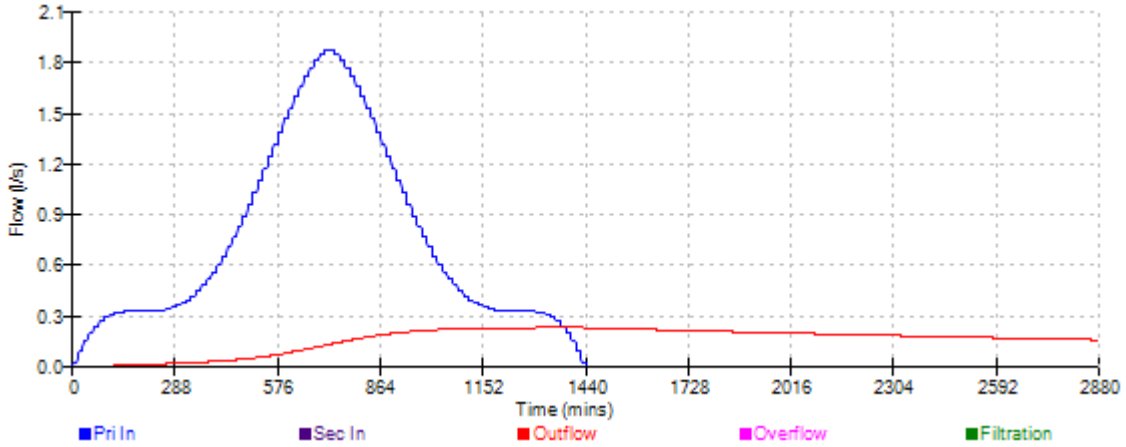
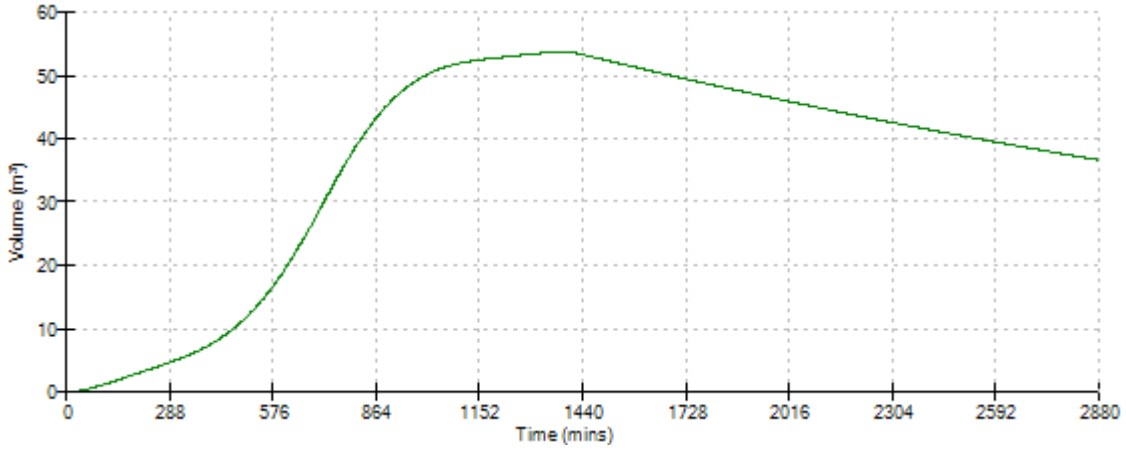
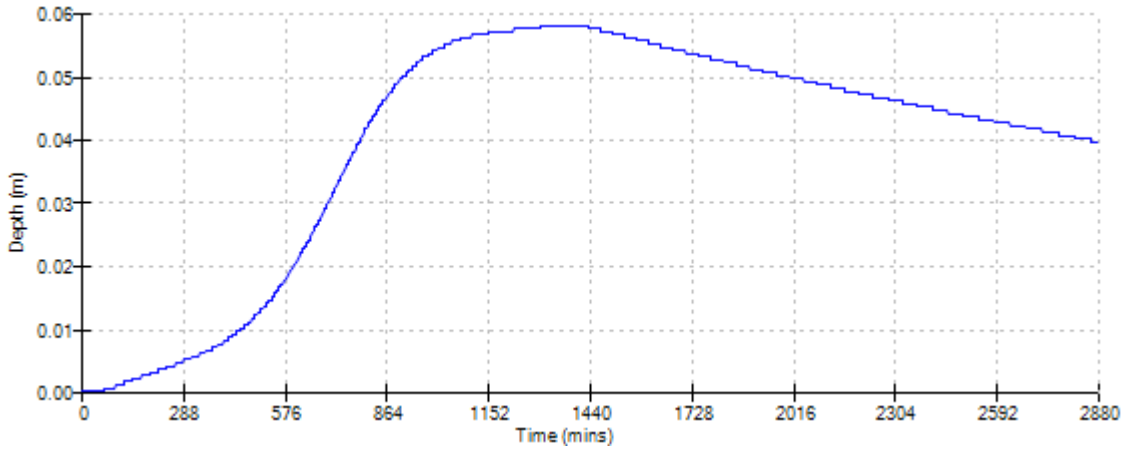
Event: 1440 min Winter







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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
15 min Summer	59.826	0.026	0.1	23.8	Flood Risk
30 min Summer	59.834	0.034	0.1	31.2	Flood Risk
60 min Summer	59.842	0.042	0.2	38.8	Flood Risk
120 min Summer	59.851	0.051	0.2	46.5	Flood Risk
180 min Summer	59.855	0.055	0.2	50.8	Flood Risk
240 min Summer	59.858	0.058	0.2	53.7	Flood Risk
360 min Summer	59.863	0.063	0.3	57.6	Flood Risk
480 min Summer	59.865	0.065	0.3	60.3	Flood Risk
600 min Summer	59.868	0.068	0.3	62.1	Flood Risk
720 min Summer	59.869	0.069	0.3	63.5	Flood Risk
960 min Summer	59.871	0.071	0.3	65.3	Flood Risk
1440 min Summer	59.872	0.072	0.3	66.6	Flood Risk
2160 min Summer	59.873	0.073	0.3	66.8	Flood Risk
2880 min Summer	59.873	0.073	0.3	66.7	Flood Risk
4320 min Summer	59.872	0.072	0.3	65.9	Flood Risk
5760 min Summer	59.870	0.070	0.3	64.6	Flood Risk
7200 min Summer	59.868	0.068	0.3	62.9	Flood Risk
8640 min Summer	59.867	0.067	0.3	61.2	Flood Risk
10080 min Summer	59.865	0.065	0.3	59.5	Flood Risk
15 min Winter	59.829	0.029	0.1	26.6	Flood Risk
30 min Winter	59.838	0.038	0.2	34.9	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	138.153	0.0	7.4	19
30 min Summer	90.705	0.0	9.7	34
60 min Summer	56.713	0.0	20.5	64
120 min Summer	34.246	0.0	24.6	124
180 min Summer	25.149	0.0	26.9	184
240 min Summer	20.078	0.0	28.4	244
360 min Summer	14.585	0.0	30.5	362
480 min Summer	11.622	0.0	31.9	482
600 min Summer	9.738	0.0	32.9	602
720 min Summer	8.424	0.0	33.6	722
960 min Summer	6.697	0.0	34.3	962
1440 min Summer	4.839	0.0	34.4	1440
2160 min Summer	3.490	0.0	61.0	1772
2880 min Summer	2.766	0.0	61.6	2132
4320 min Summer	1.989	0.0	59.3	2940
5760 min Summer	1.573	0.0	92.8	3752
7200 min Summer	1.311	0.0	93.9	4608
8640 min Summer	1.129	0.0	93.3	5368
10080 min Summer	0.994	0.0	91.1	6248
15 min Winter	138.153	0.0	8.3	19
30 min Winter	90.705	0.0	10.9	34

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Control (l/s)	Max Volume (m³)	Status
60 min Winter	59.847	0.047	0.2	43.5	Flood Risk
120 min Winter	59.857	0.057	0.2	52.1	Flood Risk
180 min Winter	59.862	0.062	0.2	56.9	Flood Risk
240 min Winter	59.865	0.065	0.3	60.2	Flood Risk
360 min Winter	59.870	0.070	0.3	64.6	Flood Risk
480 min Winter	59.873	0.073	0.3	67.6	Flood Risk
600 min Winter	59.876	0.076	0.3	69.7	Flood Risk
720 min Winter	59.878	0.078	0.3	71.3	Flood Risk
960 min Winter	59.880	0.080	0.3	73.4	Flood Risk
1440 min Winter	59.882	0.082	0.3	75.1	Flood Risk
2160 min Winter	59.882	0.082	0.3	75.0	Flood Risk
2880 min Winter	59.881	0.081	0.3	74.7	Flood Risk
4320 min Winter	59.879	0.079	0.3	72.9	Flood Risk
5760 min Winter	59.877	0.077	0.3	70.5	Flood Risk
7200 min Winter	59.874	0.074	0.3	67.8	Flood Risk
8640 min Winter	59.871	0.071	0.3	65.1	Flood Risk
10080 min Winter	59.868	0.068	0.3	62.6	Flood Risk

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
60 min Winter	56.713	0.0	23.0	64
120 min Winter	34.246	0.0	27.6	122
180 min Winter	25.149	0.0	30.1	182
240 min Winter	20.078	0.0	31.8	240
360 min Winter	14.585	0.0	34.2	358
480 min Winter	11.622	0.0	35.7	476
600 min Winter	9.738	0.0	36.8	592
720 min Winter	8.424	0.0	37.6	708
960 min Winter	6.697	0.0	38.5	934
1440 min Winter	4.839	0.0	38.5	1382
2160 min Winter	3.490	0.0	68.3	1964
2880 min Winter	2.766	0.0	69.0	2220
4320 min Winter	1.989	0.0	66.4	3152
5760 min Winter	1.573	0.0	103.9	4040
7200 min Winter	1.311	0.0	105.1	4904
8640 min Winter	1.129	0.0	104.5	5792
10080 min Winter	0.994	0.0	102.0	6648

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	20.000	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.092

Time (mins) From:	To:	Area (ha)
0	4	0.092

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Model Details

Storage is Online Cover Level (m) 60.000

Tank or Pond Structure

Invert Level (m) 59.800

Depth (m)	Area (m²)	Depth (m)	Area (m²)
0.000	920.0	0.200	920.0

Depth/Flow Relationship Outflow Control

Invert Level (m) 59.800

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	0.4000	0.200	0.4000

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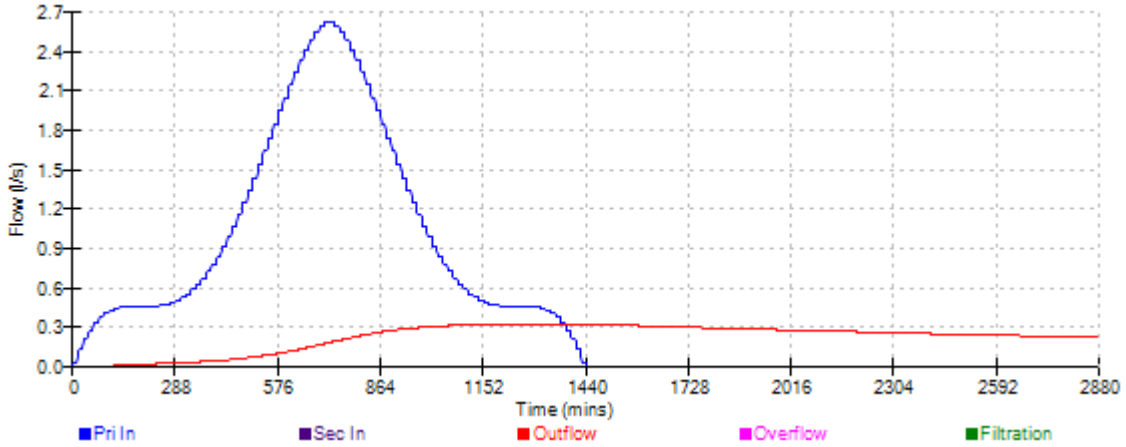
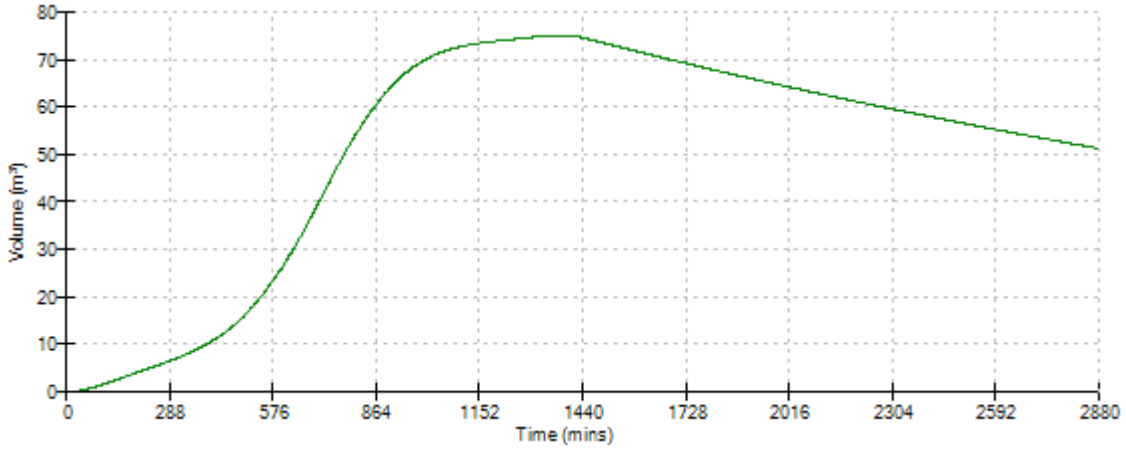
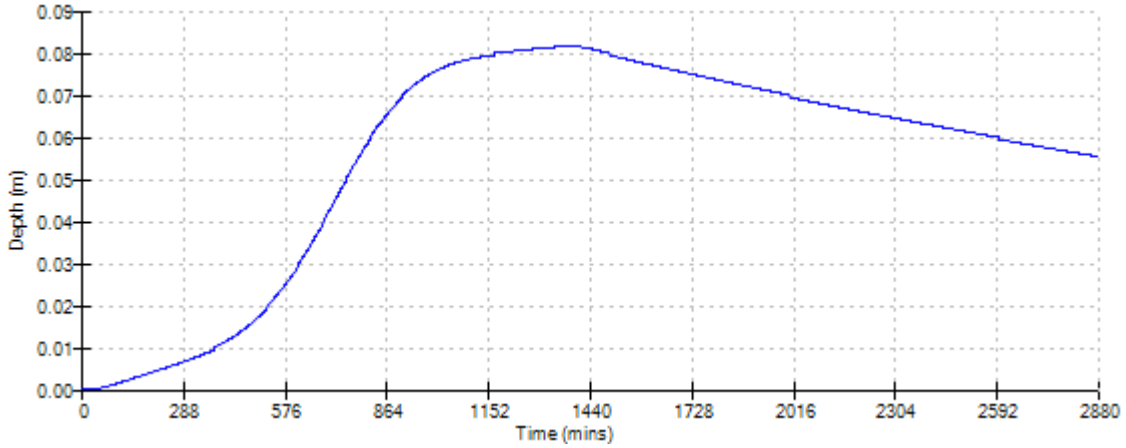
Event: 1440 min Winter







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